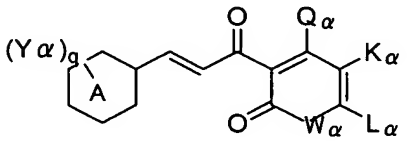
CLAIMS

1. A I type collagen gene transcription suppressing composition, which comprises a cinnamoyl compound represented by the formula (I):



(I)

[wherein

I. A represents a benzene ring or a pyridine ring, in $(Y_\alpha)_q$, Y_α is a substituent on a carbon atom, and represents a substituent of the following X_0 group or Y_0 group, q represents 0, 1, 2, 3, 4 or 5, when q is 2 or more, Y_α's are the same or different and, when q is 2 or more, the adjacent two same or different Y_α's constitute a group of a Z_0 group, and may be fused with an A ring;

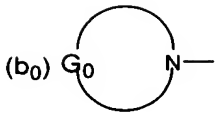
(1) a X_0 group:

a M_a-group [M_a represents a R_b-group (R_b represents a C1-C10 alkyl group optionally substituted with a halogen atom), a halogen atom, a nitro group, a cyano group, a hydroxy group, a R_c-B_a-R_d-group (R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group, R_d represents a single bond or a C1-C10 alkylene group), a HOR_d-group (R_d is as defined above), a R_e-CO-R_d-group (R_e represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, and R_d is as defined above), a R_e-CO-O-R_d-group (R_e and R_d are as

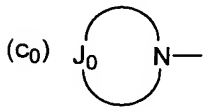
defined above), a $R_eO-CO-R_d$-group (R_e and R_d are as defined above), a HO-CO-CH=CH-group, a $R_eR_e'N-R_d$-group (R_e and R_e' are the same or different, R_e is as defined above, R_e' has the same meaning as that of R_e, and R_d is as defined above), a $R_bO-CO-NR_e'-R_d$-group (R_b, R_e' and R_d are as defined above), a $R_bO-CO-N(R_e)-R_d$-group (R_b, R_e and R_d are as defined above), a $R_eR_e'N-CO-R_d$-group (R_e, R_e' and R_d are as defined above), a $R_eR_e'N-CO-NR_e''-R_d$-group (R_e, R_e' and R_e'' are the same or different, R_e and R_e' are as defined above, R_e'' has the same meaning as that of R_e, and R_d is as defined above), a $R_eR_e'N-C(=NR_e'')-R_e'''-R_d$-group ($R_e$, R_e', R_e'' and R_e''' are the same or different, R_e, R_e' and R_e'' are as defined above, R_e''' has the same meaning as that of R_e, and R_d is as defined above), a $R_b-SO_2-NR_e-R_d$-group (R_b, R_e and R_d are as defined above), a $R_eR_e'N-SO_2-R_d$-group (R_e, R_e' and R_d are as defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl group.];

(2) a Y_0 group :

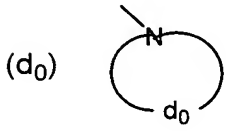
a $M_{b0}-R_d$-group [M_{b0} represents a M_{c0}-group {M_{c0} represents a $M_{d0}-R_d'$-group {M_{d0} represents a 6 to 10-membered aryl group optionally substituted with a M_a-group (M_a is as defined above), or 5 to 10-membered heteroaryl group optionally substituted with M_a group (M_a is as defined above), or a 3 to 10-membered hydrocarbon ring or heterocycle optionally substituted with a M_a-group (M_a is defined above) and optionally containing an unsaturated bond, or



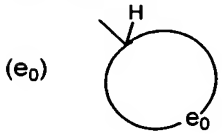
a (b_0)-group (in (b_0), G_0 constitutes a saturated or unsaturated non-aromatic 5 to 14-membered hydrocarbon ring or heterocycle optionally having a substituent),



a (c_0)-group (in (C_0), J_0 may contain a nitrogen atom, and constitutes an aromatic 5 to 7-membered ring),



a (d_0)-group {d_0 represents a 5 to 12-membered hydrocarbon ring substituted with carbonyl group or a thiocarbonyl group and, further, optionally substituted with an oxy group, a thio group, a $-NR_1$-group {R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with halogen atom or a R_2-B_1-group (R_2 represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkenyl group, and B_1 represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkenyl group}, a sulfinyl group, or a sulfonyl group} or



an (e_0)-group {e_0 constitutes a 5 to 12-membered

hydrocarbon ring optionally substituted with a carbonyl group, a thiocarbonyl group, an oxy group, a thio group, a $-NR_1-$group (R_1 is as defined above), a sulfinyl group or a sulfonyl group}, R_d' is the same as or different from R_d, and has the same meaning as that of R_d}}, a $M_{c0}-B_a-$group (M_{c0} and B_a are as defined above), a $M_{c0}-CO-$group (M_{c0} is as defined above), a $M_{c0}-CO-O$group (M_{c0} is as defined above), a $M_{c0}O-CO-$group (M_{c0} is as defined above), a $M_{c0}R_eN-$group (M_{c0} and R_e are as defined above), a $M_{c0}-CO-NR_e-$group (M_{c0} and R_e are as defined above), a $M_{c0}O-CO-NR_e-$group (M_{c0} and R_e are as defined above), a $M_{c0}R_eN-CO-$group (M_{c0} and R_e are as defined above), a $M_{c0}R_eN-CO-NR_e'-$group (M_{c0}, R_e and R_e' are as defined above), a $M_{c0}R_eN-C(=NR_e')-NR_e''-$group ($M_{c0}$, R_e, R_e' and R_e'' are as defined above), a $M_{c0}-SO_2-NR_e-$group (M_{c0} and R_e are as defined above) or $M_{c0}R_eN-SO_2-$group (M_{c0} and R_e are as defined above), and R_d is as defined above.];

(3) a Z_0 group: a group which is a 5 to 12-membered hydrocarbon ring or heterocycle having a halogen atom, a C1-C10 alkoxy group, a C3-C10 alkenyloxy group, a C3-C10 alkynyloxy group, a carbonyl group, a thiocarbonyl group, an oxy group, a thio group, a sulfinyl group or a sulfonyl group, is an aromatic or non-aromatic monocyclic or fused ring, and is fused with an A ring;

II. Q_α represents an optionally substituted hydroxyl group, or an optionally substituted amino group;

III. W_α represents an oxygen atom or a-$NT_\alpha-$group (T_α represents a hydrogen atom, or a substituent on a nitrogen

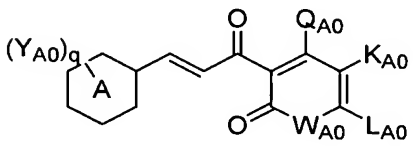
atom.);

IV. K_α and L_α are the same or different, and represent a hydrogen atom, or a substituent on a carbon atom, or K_α and L_α may form a C1-C10 alkylene group optionally having a substituent or a C1-C10 alkenylene group optionally having a substituent; provided that when an A ring is a benzene ring, W_α is an oxygen atom, L_α is a methyl group, K_α is a hydrogen atom, and Q_α is a C1-C4 alkoxy group, a C3-C4 alkenyloxy group or a C3-C4 alkynyloxy group, then q is not 0 and, when an A ring is a benzene ring, W_α is an oxygen atom, L_α is a methyl group, K_α is a hydrogen atom, and Q_α is a C1-C4 alkoxy group, a C3-C4 alkenyloxy group or a C3-C4 alkynyloxy group, then q is 1, and Y_α is not a halogen atom, or a C1-C4 alkyl group optionally substituted with a halogen atom or a C1-C4 alkoxy group, or a nitro group, or a C1-C4 alkoxy group, or a RB-group (R represents a C1-C4 haloalkyl group, and B represents an oxy group or a thio group) and, when A is a benzene ring, W_α is an oxygen atom, L_α and K_α form a 1,3-butadienylene group, and Q_α is a methoxy group, then q is 1, and Y_α is not a methoxy group or an ethoxy group and, when A is a benzene ring, W_α is an oxygen atom, L_α and K_α form a 1,3-butadienylene group, and Q_α is a hydroxyl group, then q is 1, and Y_α is not an ethoxy group; and

the "as defined above" in the same symbol between a plurality of substituents indicates that the plurality of substituents independently represent the same meaning as

that described above and, between the plurality of substituents, a selection range of selected substituents is the same, while the selected substituents may be the same or the different as far as they are selected in the range]; and an inert carrier;

2. A I type collagen gene transcription suppressing composition, which comprises a cinnamoyl compound represented by the formula (II):



(II)

[wherein

I. A represents a benzene ring or pyridine ring;

II. In $(Y_{A0})q$, Y_{A0} is a substituent on a carbon atom, and represents a substituent of the following X_0 group and Y_0 group, q represents 0, 1, 2, 3, 4 or 5, when q is 2 or more, Y_{A0}'s are the same or different and, when q is 2 or more, the adjacent two same or different Y_{A0}'s constitute a group of a Z_0 group, and may be fused with an A ring;

(1) a X_0 group:

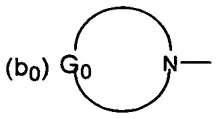
a M_a-group [M_a represents a R_b group (R_b represents a C1-C10 alkyl group optionally substituted with a halogen atom), a halogen atom, a nitro group, a cyano group, a hydroxyl group, a R_c-B_a-R_d-group (R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-

C10 alkylene group), a HOR_d-group (R_d is as defined above), a R_e-CO-R_d-group (R_e represents hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, and R_d is as defined above), a R_e-CO-O-R_d-group (R_e and R_d are as defined above), a R_eO-CO-R_d-group (R_e and R_d are as defined above), a HO-CO-CH=CH-group, a $R_eR_e'N$-R_d-group (R_e and R_e' are the same or different, R_e' has the same meaning as that of R_e and R_d is as defined above), a R_e-CO-NR_e'-R_d-group (R_e, R_e' and R_d are as defined above), a R_bC-CO-N(R_e)-R_d-group (R_b, R_e and R_d are as defined above), a $R_eR_e'N$-CO-R_d-group (R_e, R_e' and R_d are as defined above), a $R_eR_e'N$-CO-NR_e''-R_d-group (R_e, R_e' and R_e'' are the same or different, R_e and R_e' are as defined above, R_e'' has the same meaning as that of R_e and R_d is as defined above), a $R_eR_e'N$-C(=NR_e'')-NR_e'''-R_d-group (R_e, R_e', R_e'' and R_e''' are the same or different, R_e, R_e' and R_e'' are as defined above, R_e''' has the same meaning as that of R_e, and R_d is as defined above), a R_b-SO_2-NR_e-R_d-group (R_b, R_e and R_d are as defined above), a $R_eR_e'N$-SO_2-R_d-group (R_e, R_e' and R_d are as defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl group.];

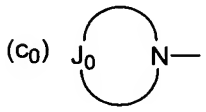
(2) a Y_0 group:

a M_{b0}-R_d-group [M_{b0} represents a M_{c0} group {M_{c0} represents a M_{d0}-R_d'-group {M_{d0} represents a 6 to 10-membered aryl group optionally substituted with a M_a-group (M_a is as defined above), or a 5 to 10-membered heteroaryl group optionally substituted with a M_a-group (M_a is as defined above), a 3 to 10-membered hydrocarbon ring or

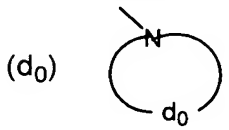
heterocycle optionally substituted with a M_a -group (M_a is as defined above) and optionally containing an unsaturated bond, or



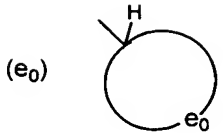
a (b_0)-group (in (b_0), G_0 constitutes a saturated or unsaturated non-aromatic 5 to 14-membered hydrocarbon ring or heterocycle optionally having a substituent),



a (c_0)-group (in (c_0), J_0 may contain a nitrogen atom, and constitutes an aromatic 5 to 7-membered ring),



a (d_0)-group {d_0 constitutes a 5 to 12-membered hydrocarbon ring substituted with a carbonyl group or a thiocarbonyl group and, further, optionally substituted with an oxy group, a thio group, a $-NR_1$-group {R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with a halogen atom or a R_2-B_1-group (R_2 represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkynyl group, and a B_1 represents an oxy group, a thio group, a sulfinyl group or sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group}, a sulfinyl group or a sulfonyl group} or



an (e_0)-group {e_0 represents a 5 to 12-membered hydrocarbon ring optionally substituted with a carbonyl group, a thiocarbonyl group, an oxy group, a thio group, a $-NR_1-$ group (R_1 is as defined above), a sulfinyl group or a sulfonyl group}, R_d' is the same as or different from R_d, and has the same meaning as that of R_d}}, a $M_{c0}-B_a$-group (M_{c0} and B_a are as defined above), a M_{c0}-CO-group (M_{c0} is as defined above), a M_{c0}-CO-O-group (M_{c0} is as defined above), a $M_{c0}O$-CO-group (M_{c0} is as defined above), a $M_{c0}R_eN$-group (M_{c0} and R_e are as defined above), a M_{c0}-CO-NR_e-group (M_{c0} and R_e are as defined above), a $M_{c0}O$-CO-NR_e-group (M_{c0} and R_e are as defined above), a $M_{c0}R_eN$-CO-group (M_{c0} and R_e are as defined above), a $M_{c0}R_eN$-CO-NR_e'-group (M_{c0}, R_e and R_e' are as defined above), a $M_{c0}R_eN$-C(=NR_e')-NR_e''-group (M_{c0}, R_e, R_e' and R_e'' are as defined above), a $M_{c0}-SO_2-NR_e$-group (M_{c0} and R_e are as defined above) or $M_{c0}R_eN-SO_2$-group (M_{c0} and R_e are as defined above), and R_d is as defined above.];

(3) a Z_0 group: a group which is a 5 to 12-membered hydrocarbon ring or heterocycle ring optionally having a halogen atom, a C1-C10 alkoxy group, a C3-C10 alkenyloxy group, a C3-C10 alkynyloxy group, a carbonyl group, a thiocarbonyl group, an oxy group, a thio group, a sulfinyl group or a sulfonyl group, is an aromatic or non-aromatic

monocyclic or fused ring, and is fused with an A ring;

III. Q_{A0} represents a hydroxyl group, a (b_0)-group((b_0) is as defined above), an A_9-B_6-B_c-group [A_9 represents a substituent of the following A_7 group or A_8 group, B_6 represents a carbonyl group or a thiocarbonyl group, and B_c represents an oxy group or a $-N((O)_mR_1)$-group {m represents 0 or 1, and R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with a halogen atom or a R_2-B_1-group (R_2 represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkynyl group, and B_1 represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group}, provided that when A_9 is a hydrogen atom, then B_c is not a sulfonyl group], an A_7"-SO_2-B_c-group (A_7" represents a substituent of the following A_7" group, and B_c is as defined above), an A_8-SO_2-B_c-group (A_8 represents a substituent of the following A_8 group, and B_c is as defined above, provided that A_8 is not a hydrogen atom), a $R_1R_1'N$-SO_2-B_c-group (R_1 is as defined above, R_1' and R_1 are the same or different, and has the same meaning as that of R_1, and B_c is as defined above), a (b_0)-SO_2-B_c-group ((b_0) and B_c are as defined above), an A_9'-B_c-group (A_9' represents a substituent of the following A_7' group or A_8' group, and B_c is as defined above), a D_5-R_4-B_c-group (D_5 represents a substituent of the following D_5 group, R_4

represents a C1-C10 alkylene group, and B_c is as defined above), a M_{c0}-B_3-B_c-group (B_3 represents a carbonyl group, a thiocarbonyl group or a sulfonyl group, and M_{c0} and B_c are as defined above) or a M_{c0}-B_c-group (M_{c0} and B_c are as defined above);

(1) an A_7 group:

a C2-C10 alkenyl group optionally substituted with a halogen atom, a C2-C10 alkynyl group, a C3-C10 haloalkynyl group, a R_2-B_1-R_4-group (R_2 and B_1 are as defined above, and R_4 is as defined above), a D_4-R_4-group (D_4 represents a substituent of the following D_4 group, and R_4 is as defined above), a D_5-R_4-group (D_5 represents a substituent of the following D_5 group, and R_4 is as defined above), a D_1-R_4-group {D_1 represents a substituent of the following D_1-group, and R_4 is as defined above}, a (b_0)-R_4-group ((b_0) is as defined above, and R_4 is as defined above), a (c_0)-R_4-group ((c_0) is as defined above, and R_4 is as defined above), a D_2-R_4-group {D_2 represents a substituent of the following D_2 group, and R_4 is as defined above}, a D_3-R_4-group {D_3 represents a substituent of the following D_3 group, and R_4 is as defined above}, an A_4-SO_2-R_4-group {A_4 represents a (b_0)-group ((b_0) is as defined above), a (c_0)-group ((c_0) is as defined above) or a $R_1R_1'N$-group (R_1 and R_1' are as defined above), and R_4 is as defined above} or an A_2-CO-R_4-group (A_2 represents a substituent of the

following A_2 group, and R_4 is as defined above);

(2) an A_8 group: a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom;

(3) an A_7' group: a C3-C10 alkenyl group optionally substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R_2-B_1-R_4'-group (R_2 and B_1 are as defined above, and R_4' represents a C2-C10 alkylene group), a D_4-R_4'-group (D_4 and R_4' are as defined above), a D_1-R_4'-group (D_1 and R_4' are as defined above), a (b_0)-R_4'-group ((b_0) and R_4' are as defined above), a (c_0)-R_4'-group ((c_0) and R_4' are as defined above), a D_2-R_4-group (D_2 and R_4 are as defined above), a D_3-R_4'-group (D_3 and R_4' are as defined above) or an A_2-CO-R_4-group (A_2 and R_4 are as defined above);

(4) an A_8' group: a C1-C10 alkyl group or C2-C10 haloalkyl group;

(5) an A_7'' group: a C2-C10 alkenyl group, a C3-C10 alkenyl group substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R_2-B_1-R_4'-group (R_2, B_1 and R_4' are as defined above), a D_4-R_4'-group (D_4 and R_4' are as defined above), a D_5-R_4-group (D_5 and R_4 are as defined above), a D_1-R_4'-group (D_1 and R_4' are as defined above), (b_0)-R_4'-group ((b_0) and R_4' are as defined above), a (c_0)-R_4'-group ((c_0) and R_4' are as defined above), a D_2-R_4-group (D_2 and R_4 are as defined

above), a NO_2-R_4-group (R_4 is as defined above) or an A_2-CO-R_4-group (A_2 and R_4 are as defined above);

(i) a D_4-group: a hydroxy group or an A_1-O-group [A_1 represents a R_3-$(CHR_0)_m$-$(B_2$-$B_3)$-$_{m'}$-group {R_3 represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom or a R_2-B_1-group (R_2 and B_1 are as defined above), or a C2-C10 alkenyl group, or a C2-C10 alkynyl group, R_0 represents a hydrogen atom, a C1-C10 alkyl group or a C2-C10 haloalkyl group, m is as defined above, B_2 represents a single bond, an oxy group, a thio group or a $-N((O)_nR_1')$-group (R_1' is as defined above, and n represents 0 or 1), B_3 is as defined above, m' represents 0 or 1 and, when B_3 is a sulfonyl group, then m is 0, and R_3 is not a hydrogen atom}];

(ii) a D_5 group: an $O=C(R_3)$-group (R_3 is as defined above), an A_1-$(O)_n$-$N=C(R_3)$-group (A_1, n and R_3 are as defined above), a R_1-B_0-CO-R_4-$(O)_n$-$N=C(R_3)$-group [R_1, R_4, n and R_3 are as defined above, and B_0 represents an oxy group, a thio group or a $-N((O)_mR_1')$-group (R_1' and m are as defined above)], a D_2-R_4-$(O)_n$-$N=C(R_3)$-group (D_2, R_4, n and R_3 are as defined above) or a R_1A_1N-$N=C(R_3)$-group (R_1, A_1 and R_3 are as defined above);

(iii) a D_1 group: a $(R_1$-$(O)_k$-$)A_1N$-$(O)_{k'}$-group (R_1 and A_1 are as defined above, and k and k' are the same or different and represent 0 or 1);

(iv) a D_2 group: a cyano group, a $R_1R_1'NC(=N-(O)_n-A_1)$-group (R_1, R_1', n and A_1 are as defined above), an $A_1N=C(-OR_2)$-group (A_1 and R_2 are as defined above) or a NH_2-CS-group;

(v) a D_3 group: a nitro group or a R_1OSO_2-group (R_1 is as defined above);

(vi) an A_2 group:

1) an A_3-B_4-group

[A_3 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 haloalkyl group, or a C2-C10 alkenyl group optionally substituted with a halogen atom, or a C3-C10 alkynyl group optionally substituted with a halogen atom, or a R_a-$(R_4)_m$-group (R_a represents a phenyl group, a pyridyl group, a furyl group or a thienyl group, optionally substituted with a halogen atom, C1-C10 alkyl group, a C1-C10 alkoxy group or a nitro group, R_4 and m are as defined above), or a C1-C10 alkyl group substituted with a (b_0)-R_4-group ((b_0) and R_4 are as defined above), a $((c_0)$-R_4-group ((c_0) and R_4 are as defined above), a R_2-B_1-R_4-group (R_2, B_1 and R_4 are as defined above), a D_4-R_4-group (D_4 and R_4 are as defined above), a D_5-group (D_5 is as defined above), a D_1-R_4-group (D_1 and R_4 are as defined above), a D_2-group (D_2 is as defined above), a D_3-R_4-group (D_3 and R_4 are as defined above) or an R_4-SO_2-R_4-group {A_4 is as defined above, and R_4 is as defined above};

B_4 represents an oxy group, a thio group or a -

$N((O)_mR_1)$group (R_1 and m are as defined above), provided that when B_4 is a thio group, then A_3 is not a hydrogen atom.];

2) a R_1-B_4-CO-R_4-B_4'-group (R_1, B_4 and R_4 are as defined above, B_4' is the same as or different from B_4, and has the same meaning as that of B_4, provided that when B_4 is a thio group, then R_2 is not hydrogen atom) or a D_2-R_4-B_4-group (D_2, R_4 and B_4 are as defined above);

3) a R_2-SO_2-NR_1-group (R_2 is as defined above, provided that a hydrogen atom is excluded; R_1 is as defined above);

4) a (b_0)-group ((b_0) is as defined above);

5) a (c_0)-group ((c_0) is as defined above); or

6) a R_1-A_1N-NR_1'-group (R_1, A_1 and R_1' are as defined above);

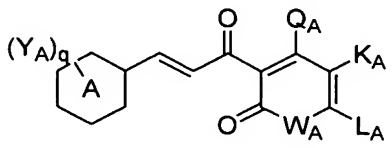
IV. W_{A0} represents an oxygen atom or a $-NT_{A0}$-group [T_{A0} represents a hydrogen atom, an A_9' group (A_9' is as defined above), a D_5-R_4-group (D_5 and R_4 are as defined above) or a M_{c0}-group (M_{c0} is as defined above)];

V. K_{A0} represents a hydrogen atom, a halogen atom or a C1-C10 alkyl group, L_{A0} represents a hydrogen atom, a C1-C10 alkyl group or a M_{b0}-group (M_{b0} is as defined above), or K_{A0} and L_{A0} may form a C1-C10 alkylene group, or a C1-C10 alkenylene group optionally substituted with single or the same or different plural M_a groups, provided that when an A ring is a benzene ring, W_{A0} is an oxygen atom, L_{A0} is a methyl group, K_{A0} is a hydrogen atom, and Q_{A0} is a C1-C4

alkoxy group, a C3-C4 alkenyloxy group or a C3-C4 alkynyloxy group, then q is not 0 and, when an A ring is a benzene ring, W_{A0} is an oxygen atom, L_{A0} is a methyl group, K_{A0} is a hydrogen atom, and Q_{A0} is a C1-C4 alkoxy group, a C3-C4 alkenyloxy group or a C3-C4 alkynyloxy group, then q is 1, and Y_{A0} is not a halogen atom, or a C1-C4 alkyl group optionally substituted with a halogen atom or a C1-C4 alkoxy group, or a nitro group, or a C1-C4 alkoxy group, or a RB-group (R represents a C1-C4 haloalkyl group, and B represents an oxy group or a thio group)and, when A is a benzene ring, W_{A0} is an oxygen atom, L_{A0} and K_{A0} form a 1,3-butadienylene group, and Q_{A0} is a methoxy group, q is 1, and Y_{A0} is not a methoxy group or an ethoxy group and, when A is a benzene ring, W_{A0} is an oxygen atom, L_{A0} and K_{A0} form a 1,3-butadienylene group, and Q_{A0} is a hydroxy group, then q is 1, and Y_{A0} is not an ethoxy group; and

the "as defined above" in the same symbol between a plurality of substituents indicates that the plurality of the substituents independently represent the same meaning as that described above and, between the plurality of substituents, a selection range of selected substituents is the same, while the selected substituents may be the same or the different as far as they are selected in the range]; and an inert carrier;

3. A I type collagen gene transcription suppressing composition, which comprises a cinnamoyl compound represented by the formula (III):



(III)

[wherein

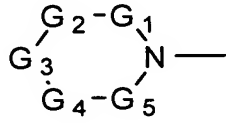
I. A represents a benzene ring or a pyridine ring;

II. In $(Y_A)_q$, Y_A is a substituent on a carbon atom, and represents a substituent of the following X group or Y group, q represents 0, 1, 2, 3, 4 or 5, when q is 2 or more, Y_A's are the same or the different and, when q is 2 or more, the adjacent two same or different Y_A's constitute a group of a Z group, and may be fused with an A ring;

(1) a X group: a M_a-group [M_a represents a R_b-group (R_b represents a C1-C10 alkyl group optionally substituted with a halogen atom), a halogen atom, a nitro group, a cyano group, a hydroxy group, a R_c-B_a-R_d-group (R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-C10 alkylene group), a HOR_d-group (R_d is as defined above), a R_e-CO-R_d-group (R_e represents a hydrogen atom, or a C1-C10 alky group optionally substituted with a halogen atom, and R_d is as defined above), a R_e-CO-O-R_d-group (R_e and R_d are as defined above), a R_eO-CO-R_d-group (R_e and R_d

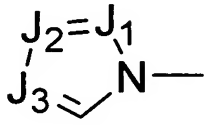
are as defined above), a HO-CO-CH=CH-group, a $R_eR_e'N-R_d$-group (R_e and R_e' are the same or different, R_e is as defined above, R_e' has the same meaning as that of R_e, and R_d is as defined above), a $R_e-CO-NR_e'-R_d$-group (R_e, $R_e'-R_d$ are as defined above), a $R_bO-CO-N(R_e)-R_d$-group (R_b, R_e and R_d are as defined above), a $R_eR_e'N-CO-R_d$-group (R_e, R_e' and R_d are as defined above), a $R_eR_e'N-CO-NR_e''-R_d$-group (R_e, R_e' and R_e'' are the same or different R_e and R_e' are as defined above, R_e'' has the same meaning as that of R_e, and R_d is as defined above), a $R_eR_e'N-C(=NR_e'')-NR_e'''-R_d$-group ($R_e$, R_e', R_e'' and R_e''' are the same or different, R_e, R_e' and R_e'' are as defined above, R_e''' has the same meaning as that of R_e and R_d is as defined above), a $R_b-SO_2-NR_e-R_d$-group (R_b, R_e and R_d are as defined above), $R_eR_e'N-SO_2-R_d$-group (R_e, R_e' and R_d are as defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl group];

(2) a Y group: a M_b-R_d-group [M_b represents a M_c-group {M_c represents a M_d-R_d'-group {M_d represents a phenyl group optionally substituted with a M_a-group (M_a is as defined above), or a pyridyl group optionally substituted with a M_a-group (M_a is as defined above), or a naphthyl group optionally substituted with a M_a-group (M_a is as defined above), or

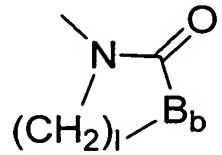
(b) 

a (b)-group {in (b), G_1, G_2, G_4 and G_5 represent a methylene

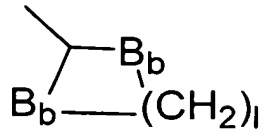
group which is connected to an adjacent atom with a single bond and may be substituted with a methyl group, or a methine group which is connected to an adjacent atom with a double bond, G_3 represents a single bond, or a double bond, or a C1-C10 alkylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a-NR_1-group {R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with a halogen atom or a R_2-B_1-group (R_2 represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkynyl group, and B_1 represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group}, or a C2-C10 alkenylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1$-group (R_1 is as defined above)},

(c) 

a (c)-group (in (c), J_1, J_2 and J_3 are the same or different, and represent a methine group optionally substituted with a methine group, or a nitrogen atom),

(d) 

a (d)-group (l is 2, 3 or 4, and B_b represents an oxy group or a thio group) or

(e) 

an (e)-group (l and B_b are as defined above), R_d' is the same as or different from R_d, and has the same meaning as that of R_d}}, a M_c-B_a-group (M_c and B_a are as defined above), a M_c-CO-group (M_c is as defined above), a M_c-CO-O-group (M_c is as defined above), a M_cO-CO-group (M_c is as defined above), a M_cR_eN-group (M_c and R_e are as defined above), a M_c-CO-NR_e-group (M_c and R_e are as defined above), a M_cO-CO-NR_e-group (M_c and R_e are as defined above), a M_cR_eN-CO-group (M_c and R_e are as defined above), a M_cR_eN-CO-NR_e'-group (M_c, R_e and Re' are as defined above), a M_cR_eN-C(=NR_e')-NR_e''-group (M_c, R_e, R_e' and R_e'' are as defined above), a M_c-SO_2-NR_e-group (M_c and R_e are as defined above) or a M_cR_eN-SO_2-group (M_c and R_e are as defined above), and R_d is as defined above];

(3) a Z group: a -N=C(Y_a)-Y_a'-group (Y_a represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, or a C1-C10 alkoxy group, Y_a' represents an oxy group, or a thio group, or an imino group optionally substituted with a C1-C10 alkyl group), a -Y_b-Y_b'-Y_b''-group (Y_b and Y_b'' are the same or different, and represent a methylene group, or an oxy group, or a thio

group, or a sulfinyl group, or an imino group optionally substituted with a C1-C10 alkyl group, and Y_b' represents a C1-C4 alkylene group optionally substituted with a halogen atom, or a C1-C4 alkylene group optionally having an oxo group) or a $-Y_c-O-Y_c'-O-$group (Y_c and Y_c' are the same or different, and represent a C1-C10 alkylene group);

III. Q_A represents a hydroxyl group, a (b)-group ((b) is as defined above), an $A_9-B_6-B_c$-group [A_9 represents a substituent of the following A_7 group or A_8 group, B_6 represents a carbonyl group or a thiocarbonyl group, B_c represents an oxy group or a $-N((O)_mR_1)-$group (m represents 0 or 1, and R_1 is as defined above), provided that when A_9 is a hydrogen atom, B_c is not a sulfonyl group], an $A_7''-SO_2-B_c$-group (A_7'' represents a substituent of the following A_7'' group, and B_c is as defined above), an $A_8-SO_2-B_c$-group (A_8 represents a substituent of the following A_8 group, B_c is as defined above, provided that A_8 is not a hydrogen atom), a $R_1R_1'N-SO_2-B_c$-group (R_1 is as defined above, R_1' is the same as or different from R_1, and has the same meaning as that of R_1, and B_c is as defined above), a (b)$-SO_2-B_c$-group ((b) and B_c are as defined above), an $A_9'-B_c$-group (A_9' represents a substituent of the following A_7' group or A_8' group, and B_c is as defined above), a $D_5-R_4-B_c$-group (D_5 represents a substituent of the following D_5 group, R_4 represents a C1-C10 alkylene group, and B_c is as defined

above), a M_c-B_3-B_c-group (B_3 represents a carbonyl group, a thiocarbonyl group or a sulfonyl group, and M_c and B_c are as defined above) or a M_c-B_c-group (M_c and B_c are as defined above);

(1) an A_7 group:

a C2-C10 alkenyl group optionally substituted with a halogen atom, a C2-C10 alkynyl group, a C3-C10 haloalkynyl group, a R_2-B_1-R_4-group (R_2 and B_1 are as defined above, and R_4 is as defined above), a D_4-R_4-group (D_4 represents a substituent of the following D_4 group, and R_4 is as defined above), a D_5-R_4-group (D_5 represents a substituent of the following D_5 group, and R_4 is as defined above), a D_1-R_4-group {D_1 represents a substituent of the following D_1 group, and R_4 is as defined above}, a (b)-R_4-group ((b) is as defined above, and R_4 is as defined above), a (c)-R_4-group ((c) is as defined above, and R_4 is as defined above), a D_2-R_4-group {D_2 represents a substituent of the following D_2 group, and R_4 is as defined above}, a D_3-R_4-group {D_3 represents a substituent of the following D_3 group, and R_4 is as defined above}, an A_4-SO_2-R_4-group {A_4 represents a (b)-group ((b) is as defined above), a (c)-group ((c) is as defined above) or a $R_1R_1'N$-group (R_1 and R_1' are as defined above), and R_4 is as defined above} or an A_2-CO-R_4-group (A_2 represents a substituent of the following A_2 group, and R_4 is as defined above);

(2) an A_8 group: a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom;

(3) an A_7' group: a C3-C10 alkenyl group optionally substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R_2-B_1-R_4'-group (R_2 and B_1 are as defined above, and R_4' represents a C2-C10 alkylene group), a D_4-R_4'-group (D_4 and R_4' are as defined above), a D_1-R_4'-group (D_1 and R_4' are as defined above), a (b)-R_4'-group ((b) and R_4' are as defined above), a (c)-R_4'-group ((c) and R_4' are as defined above), a D_2-R_4-group (D_2 and R_4 are as defined above), a D_3-R_4'-group (D_3 and R_4' are as defined above) or an A_2-CO-R_4-group (A_2 and R_4 are as defined above);

(4) an A_8' group: a C1-C10 alkyl group or a C2-C10haloalkyl group;

(5) an A_7'' group: a C2-C10 alkenyl group, a C3-C10 alkenyl group substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R_2-B_1-R_4'-group (R_2, B_1 and R_4' are as defined above), a D_4-R_4'-group (D_4 and R_4' are as defined above), a D_5-R_4-group (D_5 and R_4 are as defined above), a D_1-R_4'-group (D_1 and R_4' are as defined above), a (b)-R_4'-group ((b) and R_4' are as defined above), a (c)-R_4'-group ((c) and R_4' are as defined above), a D_2-R_4-group (D_2 and R_4 are as defined above), a NO_2-R_4-group (R_4 is as defined above) or an A_2-CO-R_4-group

(A_2 and R_4 are as defined above);

(i) a D_4 group: a hydroxyl group or an A_1-O-group [A_1 represents a R_3-$(CHR_0)_m$-$(B_2$-$B_3)_{m'}$-group {R_3 represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom or a R_2-B_1-group (R_2 and B_1 are as defined above), or a C2-C10 alkenyl group, or a C2-C10 alkynyl group, R_0 represents a hydrogen atom, a C1-C10 alkyl group or a C2-C10haloalkyl group, m is as defined above, B_2 represents a single bond, an oxy group, a thio group or a $-N(O)_nR_1'$-group (R_1' is as defined above, and n represents 0 or 1), B_3 is as defined above, m' represents 0 or 1 and, when B_3 is a sulfonyl group, m is 0, and R_3 is not a hydrogen atom}];

(ii) a D_5 group: O=C(R_3)-group (R_3 is as defined above), an A_1-$(O)_n$-N=C(R_3)-group (A_1, n and R_3 are as defined above), a R_1-B_0-CO-R_4-$(O)_n$-N=C(R_3)-group [R_1, R_4, n and R_3 are as defined above, and B_0 represents an oxy group, a thio group or a $-N(O)_mR_1'$)-group (R_1' and m are as defined above)], a D_2-R_4-$(O)_n$-N=C(R_3)-group (D_2, R_4, n and R_3 are as defined above) or a R_1A_1N-N=C(R_3)-group (R_1, A_1 and R_3 are as defined above);

(iii) a D_1 group: a $(R_1$-$(O)_k$-$)A_1N$-$(O)_{k'}$-group (R_1 and A_1 are as defined above, and k and k' are the same or different, and represent 0 or 1);

(iv) a D group: a cyano group, a $R_1R_1'NC'$(=N-$(O)_n$-A_1)-group

(R_1, R_1', n and A_1 are as defined above), an $A_1N=C(-O-)$group (A_1 and R_2 are as defined above) or a NH_2-CS-group;

(v) a D_3 group: a nitro group or a R_1OSO_2-group (R_1 is as defined above);

(vi) an A_2 group:

1) an A_3-B_4-group

[A_3 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 haloalkyl group, or a C2-C10 alkenyl group optionally substituted with a halogen atom, or a C3-C10 alkynyl group optionally substituted with a halogen atom, or a R_a-$(R_4)_m$-group (R_a represents a phenyl group, a pyridyl group, a furyl group or a thienyl group, optionally substituted with a halogen atom, a C1-C10 alkyl group, a C1-C10 alkoxy group or a nitro group, and R_4 and m are as defined above), or a C1-C10 alkyl group substituted with a (b)-R_4-group ((b) and R_4 are as defined above), a (c)-R_4-group ((c) and R_4 are as defined above), a R_2-B_1-R_4-group (R_2, B_1 and R_4 are as defined above), a D_4-R_4-group (D_4 and R_4 are as defined above), a D_5-group (D_5 is as defined above), a D_1-R_4-group (D_1 and R_4 are as defined above), a D_2-group (D_2 is as defined above), a D_3-R_4-group (D_3 and R_4 are as defined above) or an A_4-SO_2-R_4-group {A_4 is as defined above, and R_4 is as defined above};

B_4 represents an oxy group, a thio group or a -$N((O)_mR_1)$- group (R_1 and m are as defined above) provided

that when B_4 is a thio group, A_3 is not a hydrogen atom];

2) a R_1-B_4-CO-R_4-B_4'-group (R_1, B_4 and R_4 are as defined above, B_4' is the same as or different from B_4, and has the same meaning as that of B_4, provided that when B_4 is a thio group, a R_2 is not a hydrogen atom) or a D_2-R_4-B_4-group (D_2, R_4 and B_4 are as defined above);

3) a R_2-SO_2-NR_1-group (R_2 is as defined above, provided that a hydrogen atom is excluded, and R_1 is as defined above);

4) a (b)-group ((b) is as defined above);

5) a (c)-group ((c) is as defined above); or

6) a R_1A_1N-NR_1'-group (R_1, A_1 and R_1' are as defined above);

IV. W_A represents an oxygen atom or a -NT_A-group [T_A represents a hydrogen atom, an A_9'-group (A_9' is as defined above), a D_5-R_4-group (D_5 and R_4 are as define above) or a M_c-group (M_c is as defined above)];

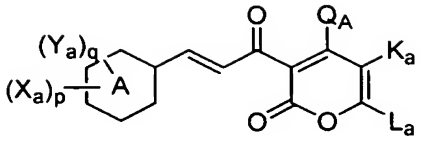
V. K_A represents a hydrogen atom, a halogen atom or a C1-C10 alkyl group, L_A represents a hydrogen atom, a C1-C10 alkyl group or a M_b-group (M_b is as defined above), or K_A and L_A may form a C1-C10 alkylene group or a -$C(M_a')=C(M_a'')$-$C(M_a''')=C(M_a'''')$-group (M_a', M_a", M_a'" and M_a"" are the same or different, are the same as or different from M_a, and represent a hydrogen atom or M_a); and

provided that when an A ring is a benzene ring, W_A is an oxygen atom, L_A is a methyl group, K_A is a hydrogen atom, and Q_A is a C1-C10 alkoxy group, a C3-10 alkenyloxy group

or a C3-C10 alkynyloxy group, then q is not 0 and, when an A ring is a benzyl ring, W_A is an oxygen atom, L_A is a methyl group, K_A is a hydrogen atom, and Q_A is a C1-C10 alkoxy group, a C3-C10 alkenyloxy group or a C3-C10 alkynyloxy group, then q is 1, and Y_A is not a halogen atom, or C1-C10 alkyl group optionally substituted with a halogen atom or a C1-C10 alkoxy group, or a nitro group, or a C1-C10 alkoxy group, or a RB-group (R represents a C1-C10haloalkyl group and B represents an oxy group or a thio group) and, when A is a benzene ring, W_A is an oxygen atom, L_A and K_A form a 1,3-butadienylene group, and Q_A is a hydroxyl group or a C1-C10 alkoxy group, then q is 1, and Y_A is not a C1-C10 alkoxy group; and

the "as defined above" in the same symbol between a plurality of substituents indicates that the plurality of substituents independently represent the same meaning as that described above and, between the plurality of substituents, a selection range of selected substituents is the same, while the selected substituents may be the same or different as far as they are selected in the range]; and an inert carrier;

4. A I type collagen gene transcription suppressing composition, which comprises a 2H-pyran-2-one compound represented by the formula (IV):



(IV)

[wherein

I. A represents a benzene ring or a pyridine ring;

II. In $(X_a)_p$, X_a is a substituent on a carbon atom, and represents a halogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom or a C1-C10 alkoxy group, or a nitro group, a C1-C10 alkoxy group, or a RB-group (R represents a C1-C10 haloalkyl group, and B represents an oxy group or a thio group), p represents 0, 1, 2, 3 or 4 and, when p is 2 or more, X_a's are the same or different;

III. In $(Y_a)_q$, Y_a is a substituent on a carbon atom, and represents a substituent of the following X_1 group or Y_1 group, q represents 0, 1, 2, 3, 4 or 5, when q is 2 or more, Y_a's are the same or different and, when q is 2 or more, the adjacent two same or different Y_a's constitute a Z_1 group, and may be fused with an A ring;

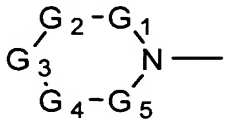
(1) a X_1 group:

a M_a-group [M_a represents a R_b-group (R_b represents a C1-C10 alkyl group optionally substituted with a halogen atom), a halogen atom, a nitro group, a cyano group, a hydroxyl group, a R_c-B_a-R_d-group (R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a

represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-C10 alkylene group), a HOR_d-group (R_d is as defined above), a R_e-CO-R_d-group (R_e represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, and R_d is as defined above), a R_e-CO-O-R_d-group (R_e and R_d are as defined above), a R_eO-CO-R_d-group (R_e and R_d are as defined above), a HO-CO-CH=CH-group, a $R_eR_e'N$-R_d-group (R_e and R_e' are the same or different, R_e is as defined above, R_e' has the same meaning as that of R_e, and R_d is as defined above), a R_e-CO-NR_e'-R_d-group (R_e, R_e' and R_d are as defined above), a R_bO-CO-N(R_e)-R_d-group (R_b, R_e and R_d are as defined above), a $R_eR_e'N$-CO-R_d-group (R_e, R_e' and R_d are as defined above), a $R_eR_e'N$-CO-NR_e''-R_d-group (R_e, R_e' and R_e'' are the same or different, R_e and R_e' are as defined above, R_e'' has the same meaning as that of R_e, and R_d is as defined above), a $R_eR_e'N$-C(=NR_e'')-NR_e'''-R_d-group (R_e, R_e', R_e'' and R_e''' are the same or different, R_e, R_e' and R_e'' are as defined above, R_e''' has the same meaning as that of R_e, and R_d is as defined above), a R_b-SO_2-NR_e-R_d-group (R_b, R_e and R_d are as defined above), a $R_eR_e'N$-SO_2-R_d-group(R_e, R_e' and R_d are as defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl group], provided that when A represents a benzene ring, a X_a-group (X_a is as defined above) is excluded;

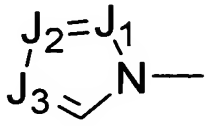
(2) a Y_1 group:

a M_b-R_d-group [M_b represents a M_c-group {M_c represents a M_d-R_d'-group {M_d represents a phenyl group optionally substituted with a M_a-group (M_a is as defined above), or a pyridyl group optionally substituted with a M_a-group (M_a is as defined above) or a naphthyl group optionally substituted with a M_a-group (M_a is as defined above), or

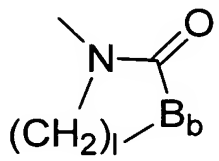
(b) 

a (b)-group {in (b), G_1, G_2, G_4 and G_5 represent a methylene group which is connected to an adjacent atom with a single bond and may be substituted with a methyl group, or a methine group which is connected to an adjacent atom with a double bond and may be substituted with a methyl group, and G_3 represents a single bond, or a double bond, or a C1-C10 alkylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1$-group {R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with a halogen atom or a R_2-B_1-group (R_2 represents a C1-C10 alkyl group, a C-C10 alkenyl group or a C3-C10 alkynyl group, and B_1 represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group}, or a C2-C10 alkenylene group optionally substituted with a methyl group, an oxy

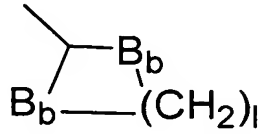
group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1-$group (R_1 is as defined above)},

(c) 

a (c)-group (in (c), J_1, J_2 and J_3 are the same or different, and represent a methine group optionally substituted with a methyl group, or a nitrogen atom),

(d) 

a (d)-group (l is 2, 3 or 4, and B_b represents an oxy group, or a thio group), or

(e) 

an (e)-group (l and B_b are as defined above), R_d' is the same as or different from R_d, and has the same meaning as that of R_d}}, a M_c-B_a-group (M_c and B_a are as defined above), a M_c-CO-group (M_c is as defined above), a M_c-CO-O-group (M_c is as defined above), a M_cO-CO-group (M_c is as defined above), a M_cR_eN-group (M_c and R_e are as defined above), a M_c-CO-NR_e-group (M_c and R_e are as defined above), a M_cO-CO-NR_e-group (M_c and R_e are as defined above), a M_cR_eN-CO-group (M_c and R_e are as defined above),a M_cR_eN-CO-NR_e'-group (M_c, R_e and R_e' are as defined above), a $McR_eN-C(=NR_e')-NR_e''$-

group (M_c, R_e, R_e' and R_e'' are as defined above), a $Mc-SO_2-NR_e$-group (M_c and R_e are as defined above) or a $M_cR_eN-SO_2$-group (M_c and R_e are as defined above), and R_d is as defined above];

(3) a Z_1 group:

a $-N=C(Y_a)-Y_a'$-group (Y_a represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, or a C1-C10 alkoxy group, and Y_a' represents an oxy group, or a thio group, or an imino group optionally substituted with a C1-C10 alkyl group), a $-Y_b-Y_b'-Y_b''$-group (Y_b and Y_b'' are the same or different, and represent a methylene group, or an oxy group, or a thio group, or a sulfinyl group, or an imino group optionally substituted with a C1-C10 alkyl group, and Y_b' represents a C1-C4alkylene group optionally substituted with a halogen atom, or a C1-C4 alkylene group optionally having an oxo group) or a $-Y_c-O-Y_c'-O$-group (Y_c and Y_c' are the same or different, and represent a C1-C10 alkylene group);

IV. Q_A represents a hydroxyl group, a (b)-group ((b) is as defined above), an $A_9-B_6-B_c$-group [A_9 represents a substituent of the following A_7 group or A_8 group, B_6 represents a carbonyl group or a thiocarbonyl group, B_c represents an oxy group or a $-N((O)_mR_1)$-group (m represents 0 or 1, and R_1 is as defined above), provided that when A_9 is a hydrogen atom, B_c is not a sulfonyl group], an $A_7''-SO_2-$

B_c-group (A_7" represents a substituent of the following A_7" group, and B_c is as defined above), an A_8-SO_2-B_c-group (A_8 represents a substituent of the following A_8 group, and B_c is as defined above, provided that A_8 is not a hydrogen atom), a $R_1R_1'N$-SO_2-Bc-group (R_1 is as defined above, R_1' is the same as or different from R_1, and has the same meaning as that of R_1, and B_c is as defined above), a (b)-SO_2-B_c-group ((b) and B_c are as defined above), an A_9'-B_c-group (A_9' represents a substituent of the following A_7' group or A_8' group, and B_c is as defined above), a D_5-R_4-B_c-group (D_5 represents a substituent of the following D_5 group, R_4 represents a C1-C10 alkylene group, and B_c is as defined above), M_c-B_3-B_c-group (B_3 represents a carbonyl group, a thiocarbonyl group or a sulfonyl group and M_c and B_c are as defined above) or a M_c-B_c-group (M_c and B_c are as defined above);

(1) an A_7 group:

a C2-C10 alkenyl group optionally substituted with a halogen atom, a C2-C10 alkynyl group, a C3-C10 haloalkynyl group, a R_2-B_1-R_4-group (R_2 and B_1 are as defined above, and R_4 is as defined above), a D_4-R_4-group (D_4 represents a substituent of the following D_4 group, and R_4 is as defined above), a D_5-R_4-group (D_5 represents a substituent of the following D_5 group, R_4 is as defined above), a D_1-R_4-group {D_1 represents a substituent of the following D_1 group, and

R_4 is as defined above}, a (b)-R_4-group {(b) is as defined above, and R_4 is as defined above}, a (c)-R_4-group ((c) is as defined above, and R_4 is as defined above), a D_2-R_4-group {D_2 represents a substituent of the following D_2 group, and R_4 is as defined above}, a D_3-R_4-group {D_3 represents a substituent of the following D_3 group, and R_4 is as defined above}, an A_4-SO_2-R_4-group {A_4 represents a (b)-group ((b) is as defined above), a (c)-group ((c) is as defined above) or a $R_1R_1'N$-group (R_1 and R_1' are as defined above), and R_4 is as defined above} or an A_2-CO-R_4-group (A_2 represents a substituent of the following A_2 group, and R_4 is as defined above);

(2) an A_8 group: a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom;

(3) an A_7' group: a C3-C10 alkenyl group optionally substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R_2-B_1-R_4'-group (R_2 and B_1 are as defined above, and R_4' represents a C_2-C10 alkylene group), a D_4-R_4'-group (D_4 and R_4' are as defined above), a D_1-R_4'-group (D_1 and R_4' are as defined above), a (b)-R_4'-group ((b) and R_4' are as defined above), a (c)-R_4'-group ((c) and R_4' are as defined above), a D_2-R_4-group (D_2 and R_4 are as defined above), a D_3-R_4'-group (D_3 and R_4' are as defined above) or an A_2-CO-R_4-group (A_2 and R_4 are as defined above);

(4) an A_8' group: a C1-C10 alkyl group or a C2-C10 haloalkyl group;

(5) an A_7'' group: a C2-C10 alkenyl group, a C3-C10 alkenyl group substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R_2-B_1-R_4'-group (R_2, B_1 and R_4' are as defined above), a D_4-R_4'-group (D_4 and R_4' are as defined above), a D_5-R_4-group (D_5 and R_4 are as defined above), a D_1-R_4'-group (D_1 and R_4' are as defined above), (b)-R_4'-group ((b) and R_4' are as defined above), a (c)-R_4'-group ((c) and R_4' are as defined above), a D_2-R_4-group (D_2 and R_4 are as defined above), a NO_2-R_4-group (R_4 is as defined above) or an A_2-CO-R_4-group (A_2 and R_4 are as defined above);

(i) a D_4' group: a hydroxyl group or an A_1-O-group [A_1 represents a R_3-$(CHR_0)_m$-$(B_2$-$B_3)_{m'}$-group {R_3 represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom or a R_2-B_1-group (R_2 and B_1 are as defined above), or a C2-C10 alkenyl group, or a C2-C10 alkynyl group, R_0 represents a hydrogen atom, a C1-C10 alkyl group or a C2-C10 haloalkyl group, m is as defined above, B_2 represents a single bond, an oxy group, a thio group or a $-N(O)_nR_1')$-group (R_1' is as defined above, and n represents 0 or 1, B_3 is as defined above, m' represents 0 or 1 and, when B_3 is a sulfonyl group, m is 0, and R_3 is not a hydrogen atom)}];

(ii) a D_5 group: an $O=C(R_3)$-group (R_3 is as defined above), an $A_1-(O)_n-N=C(R_3)$-group (A_1, n and R_3 are as defined above), a $R_1-B_0-CO-R_4-(O)_n-N=C(R_3)$-group [$R_1$, R_4, n and R_3 are as defined above, and B_0 represents an oxy group, a thio group or a $-N((O)_mR_1')$-group (R_1' and m are as defined above)], a $D_2-R_4-(O)_n-N=C(R_3$-group (D_2, R_4, n and R_3 are as defined above) or a $R_1A_1N-N=C(R_3)$-group (R_1,A_1 and R_3 are as defined above);

(iii) a D_1 group: a $(R_1-(O)_k-)A_1N-(O)_{k'}$-group ($R_1$ and A_1 are as defined above, and k and k' are the same or different, and represent 0 or 1);

(iv) a D_2 group: a cyano group, a $R_1R_1'NC(=N-(O)_n-A)$-group (R_1, R_1', n and N_1 are as defined above), an $A_1N=C(-OR_2)$-group (A_1 and R_2 are as defined above) or a NH_2-CS-group.

(v) a D_3 group: a nitro group or a R_1OSO_2-group (R_1 is as defined above);

(vi) an A_2 group:

1) an A_3-B_4-group

[A_3 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 haloalkyl group, or a C2-C10 alkenyl group optionally substituted with a halogen atom, or a C3-C10 alkynyl group optionally substituted with a halogen atom, or a $R_a-(R_4)_m$-group (R_a represents a phenyl group, a pyridyl group, a furyl group or a thienyl group, optionally substituted with a halogen atom, a C1-C10 alkyl group, a

C1-C10 alkoxy group or a nitro group, and R_4 and m are as defined above), or a C1-C10 alkyl group substituted with a (b)-R_4-group ((b) and R_4 are as defined above), a (c)-R_4-group ((c) and R_4 are as defined above), a R_2-B_1-R_4-group (R_2, B_1 and R_4 are as defined above), a D_4-R_4-group (D_4 and R_4 are as defined above), a D_5-group (D_5 is as defined above), a D_1-R_4-group (D_1 and R_4 are as defined above), a D_2-group (D_2 is as defined above), a D_3-R_4-group (D_3 and R_4 are as defined above) or an A_4-SO_2-R_4-group {A_4 is as defined above, and R_4 is as defined above};

B_4 represents an oxy group, a thio group or a $-N((O)_mR_1)-$ group (R_1 and m are as defined above), provided that when B_4 is a thio group, A_3 is not a hydrogen atom];

2) a R_1-B_4-CO-R_4-B_4'-group (R_1, B_4 and R_4 are as defined above, B_4' is the same as or different from B_4, and has the same meaning as that of B_4, provided that when B_4 is a thio group, R_2 is not a hydrogen atom) or a D_2-R_4-B_4-group (D_2, R_4 and B_4 are as defined above);

3) a R_2-SO_2-NR_1-group (R_2 is as defined above, provided that a hydrogen atom is excluded, and R_1 is as defined above),

4) a (b)-group ((b) is as defined above);

5) a (c)-group ((c) is as defined above); or

6) a R_1A_1N-NR_1'-group (R_1, R_1 and R_1' are as defined above);

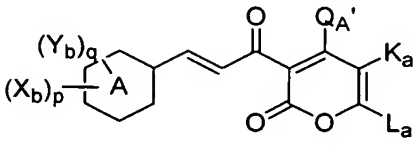
V. K_a represents a hydrogen atom, a halogen atom or a C1-C10 alkyl group, L_a represents a hydrogen atom, a C1-C10

alkyl group or a M_b-group (M_b is as defined above), or K_a and L_a may form a C1-C10 alkylene group, provided that when K_a is a hydrogen atom, L_a is a methyl group and an A ring is a benzene ring, p is 2, 3 or 4 in the case that q is 0; and

the "as defined above" in the same symbol between a plurality of substituents indicates that the plurality of substituents independently represent the same meaning as that described above and, between the plurality of substituents, a selection range of selected substituents is the same, while the selected substituents may be the same or different as far as they are selected in a range];

and an inert carrier;

5. A 2H-pyran-2-one compound represented by the formula (V):



(V)

[wherein

I. A represents a benzene ring or a pyridine ring;

II. In $(X_b)_p$, X_b is a substituent on a carbon atom, and represents a halogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom or a C1-C10 alkoxy group, or a nitro group, or a C2-C10 alkoxy group, or a RB-group (R represents a C1-C10 haloalkyl group, and B

represents an oxy group or a thio group), p represents 0, 1, 2, 3 or 4 and, when p is 2 or more, X_b's are the same or different;

III. In $(Y_b)_q$, Y_b is a substituent on a carbon atom, and represents a substituent of the following X_2 group or Y_2 group, q represents 0,1, 2, 3, 4 or 5, when q is 2 or more, Y_b's are the same or different and, when q is 2 or more, the adjacent two same or different Y_b's constitutes a group of a Z_2 group, and may be fused with an A ring;

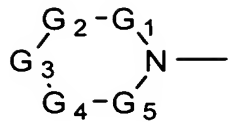
(1) a X_2 group:

a M_a-group [M_a represents a R_b-group (R_b represents a C1-C10 alkyl group optionally substituted with a halogen atom), a halogen atom, a nitro group, a cyano group, a hydroxy group, a R_c-B_a-R_d-group (R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-C10 alkylene group), a HOR_d-group (R_d is as defined above), a R_e-CO-R_d-group (R_e represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, and R_d is as defined above), a R_e-CO-O-R_d-group (R_e and R_d are as defined above), a R_eO-CO-R_d-group (R_e and R_d are as defined above), a HO-CO-CH=CH-group, a $R_eR_e'N$-R_d-group (R_e and R_e' are the same or different, R_e is as defined above, R_e' has the same meaning as that of R_e, and R_d is as defined

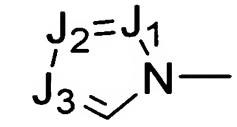
above), a R_e-CO-NR_e'-R_d-group (R_e, R_e' and R_d are as defined above), a R_bO-CO-N(R_e)-R_d-group (R_b, R_e and R_d are as defined above), a R_eR_e'N-CO-R_d-group (R_e, R_e' and R_d are as defined above), a R_eR_e'N-CO-NR_d''-R_d-group (R_e, R_e' and R_e'' are the same or different, R_e has the same meaning as that of R_e', R_e'' has the same meaning as that of R_e, and R_d is as defined above), a R_eR_e'N-C(=NR_e'')-NR_e'''-R_d-group (R_e, R_e', R_e'' and R_e''' are the same or different, R_e, R_e' and R_e'' are as defined above, R_e''' has the same meaning as that of R_e, and R_d is as defined above), a R_b-SO_2-NR_e-R_d-group (R_b, R_e and R_d are as defined above), a R_e R_e'N-SO_2-R_d -group (R_e, R_e' and R_d are as defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl group], provided that, when A represents a benzene ring, then, a halogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom or a C1-C10 alkoxy group, or a nitro group, or a C1-C10 alkoxy group, or a RB-group (R and B are as described above) is excluded;

(2) a Y_2 group:

a M_b-R_d-group [M_b represents a M_c-group {M_c represents a M_d-R_d'-group {M_d represents a phenyl group optionally substituted with a M_a-group (M_a is as defined above), or a pyridyl group optionally substituted with a M_a-group (M_a is as defined above), or a naphthyl group optionally substituted with a M_a-group (M_a is as defined above) or

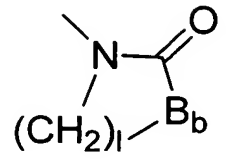
(b) 

a (b)-group {in (b), G_1, G_2, G_4 and G_5 represent a methylene group which is connected to an adjacent atom with a single bond and may be substituted with a methyl group, or a methine group which is connected to an adjacent atom with a double bond and may be substituted with a methyl group, and G_3 represents a single bond, or a double bond, or a C1-C10 alkylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group, or a $-NR_1-$group {R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with a halogen atom or a R_2-B_1-group (R_2 represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkynyl group, and B_1 represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group}, or a C2-C10 alkenylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a NR_1- group (R_1 is as defined above)},

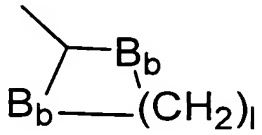
(c) 

a (c)-group (in(c), J_1, J_2 and J_3 are the same or different, and represent a methine group optionally substituted with a

methyl group, or a nitrogen atom),

(d) 

a (d) group (l is 2, 3 or 4, and B_b represents an oxy group or a thio group) or

(e) 

an (e)-group (l and B_b are as defined above), R_d' is the same as or different from R_d, and has the same meaning as that of R_d}}, a M_c-B_a-group (M_c and B_a are as defined above), a M_c-CO-group (M_c is as defined above), a M_c-CO-O-group (M_c is as defined above), a M_cO-CO-group (M_c is as defined above), a M_cR_eN-group (M_c and R_e are as defined above), a M_c-CO-NR_e-group (M_c and R_e are as defined above), a M_cO-CO-NR_e-group (M_c and R_e are as defined above), a M_cR_eN-CO-group (M_c and R_e are as defined above), a M_cR_eN-CO-NR_e'-group (M_c, R_e and R_d' are as defined above), a M_cR_eN-C(=NR_e')-NR_e''-group (M_c , R_e, R_e' and R_e'' are as defined above), a M_c-SO_2-NR_e-group (M_c and R_e are as defined above) or M_cR_eN-SO_2-group (M_c and R_e are as defined above), and R_d is as defined above];

(3) a Z_2 group:

a -N=C(Y_a)-Y_a'-group (Y_a represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen

atom, or a C1-C10 alkoxy group, and Y_a' represents an oxy group, or a thio group, or an imino group optionally substituted C1-C10 alkyl group), a $-Y_b-Y_b'-Y_b''$-group (Y_b and Y_b'' are the same or different, and represent a methylene group, or an oxy group, or a thio group, or a sulfinyl group, or an imino group optionally substituted with a C1-C10 alkyl group, and Y_b' represents a C1-C4 alkylene group optionally substituted with a halogen atom, or a C1-C4 alkylene group optionally having an oxo group) or a $-Y_c-O-Y_c'-O-$group (Y_c and Y_c' are the same or different, and represent a C1-C10 alkylene group);

III. Q_A' represents a (b)-group ((b) is as defined above), an $A_9-B_6-B_c$-group [A_9 represents a substituent of the following A_7 group or A_8 group, B_6 represents a carbonyl group or a thiocarbonyl group, and B_c represents an oxy group or a $-N((O)_mR_1$-group (m represents 0 or 1, and R_1 is as defined above), provided that when A_9 is a hydrogen atom, then B_c is not a sulfonyl group], an $A_7''-SO_2-B_c$-group (A_7'' represents a substituent of the following A_7'' group, and B_c is as defined above), an $A_8-SO_2-B_c$-group (A_8 represents a substituent of the following A_8 group, and B_c is as defined above, provided that A_8 is not a hydrogen atom), a $R_1R_1'N-SO_2-B_c$-group (R_1 is as defined above, R_1' is the same as or different from R_1, and has the same meaning as that of R_1 and B_c is as defined above), a (b)$-SO_2-B_c$-group ((b) and B_c

are as defined above), an A_9'-B_c-group (A_9' represents a substituent of the following A_7' group or A_8' group, and B_c is as defined above), a D_5-R_4-B_c-group (D_5 represents a substituent of the following D_5 group, R_4 represents a C1-C10 alkylene group, and B_c is as defined above), a M_c-B_3-B_c-group (B_3 represents a carbonyl group, a thiocarbonyl group or a sulfonyl group, and M_c and B_c are as defined above) or a M_c-B_c-group (M_c and B_c are as defined above);

(1) an A_7 group:

a C2-C10 alkenyl group optionally substituted with a halogen atom, a C2-C10 alkynyl group, a C3-C10 haloalkynyl group, a R_2-B_1-R_4-group (R_2 and B_1 are as defined above, and R_4 is as defined above), a D_4-R_4-group (D_4 represents a substituent of the following D_4 group, and R_4 is as defined above), a D_5-R_4-group (D_5 represents a substituent of the following D_5 group, and R_4 is as defined above), a D_1-R_4-group {D_1 represents a substituent of the following D_1 group, and R_4 is as defined above}, a (b)-R_4-group ((b) is as defined above, and R_4 is as defined above), a (c)-R_4-group ((c) is as defined above, and R_4 is as defined above), a D_2-R_4-group {D_2 represents a substituent of the following D_2 group, and R_4 is as defined above}, a D_3-R_4-group {D_3 represents a substituent of the following D_3 group, and R_4 is as defined above}, an A_4-SO_2-R_4-group {A_4 represents a (b)-group ((b) is as defined above), a (c)-group ((c) is as

defined above) or a $R_1R_1'N$-group (R_1 and R_1' are as defined above), and R_4 is as defined above} or an A_2-CO-R_4-group (A_2 represents a substituent of the following A_2 group, and R_4 is as defined above);

(2) an A_8 group: a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom;

(3) an A_7' group: a C3-C10 alkenyl group optionally substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a C_2-B_1-R_4'-group (C_2 and B_1 are as defined above, and R_4' represents a C2-C10 alkylene group), a D_4-R_4'-group (D_4 and R_4' are as defined above), a D_1-R_4'-group (D_1 and R_4' are as defined above), a (b)-R_4'-group ((b) and R_4' are as defined above), a (c)-R_4'-group ((c) and R_4' are as defined above), a D_2-R_4-group (D_2 and R_4 are as defined above), a D_3-R_4'-group (D_3 and R_4' are as defined above) or an A_2-CO-R_4-group (A_2 and R_4 are as defined above);

(4) an A_8-group: a C1-C10 alkyl group or a C2-C10 haloalkyl group;

(5) an A_7''-group: a C2-C10 alkenyl group, a C3-C10 alkenyl group substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R_2-B_1-R_4'-group (R_2, B_1 and R_4' are as defined above), a D_4-R_4'-group (D_4 and R_4' are as defined above), a D_5-R_4-group (D_5 and R_4 are as defined above), a D_1-R_4'-group (D_1 and R_4' are

as defined above), a (b)-R_4'-group ((b) and R_4' are as defined above), a (c)-R_4'-group ((c) and R_4' are as defined above), a D_2-R_4-group (D_2 and R_4 are as defined above), a NO_2-R_4-group (R_4 is as defined above) or an A_2-CO-R_4-group (A_2 and R_4 are as defined above);

(i) a D_4 group: a hydroxyl group or an A_1-O-group [A_1 represents a R_3-$(CHR_0)_m$-$(B_2$-$B_3)_{m'}$-group {R_3 represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom or a R_2-B_1-group (R_2 and B_1 are as defined above), or a C2-C10 alkenyl group, or a C2-C1 alkynyl group, R_0 represents a hydrogen atom, C1-C10 alkyl group or a C2-C10 haloalkyl group, m is as defined above, B_2 represents a single bond, an oxy group, a thio group or a $-N((O)_nR_1'$-group (R_1' is as defined above, and n represents 0 or 1), B_3 is as defined above, and m' represents 0 or 1 and, when B_3 is a sulfonyl group, m is 0, and R_3 is not a hydrogen atom}];

(ii) a D_5 group: O=C(R_3) group (R_3 is as defined above), an A_1-$(O)_n$-N=C(R_3)-group (A_1, n and R_3 are as defined above), an R_1-B_0-CO-R_4-$(O)_n$-N=C(R_3)-group [R_1, R_4, n and R_3 are as defined above, and B_0 represents an oxy group, a thio group or a $-N((O)_mR_1')$-group (R_1' and m are as defined above)], a D_2-R_4-$(O)_n$-N=C(R_3)-group (D_2, R_4, n and R_3 are as defined above) or a R_1A_1N-N=C(R_3)group (R_1, A_1 and R_3 are as defined above);

(iii) a D_1 group: a $(R_1\text{-}(O)_k\text{-})A_1N\text{-}(O)_k'$-group ($R_1$ and A_1 are as defined above, and k and k' are the same or different, and represent 0 or 1);

(iv) a D_2 group: a cyano group, a $R_1R_1'NC(=N\text{-}(O)_n\text{-}A_1$-group ($R_1$, R_1', n and A_1 are as defined above), an $A_1N=C(\text{-}OR_2)$-group (A_1 and R_2 are as defined above) or a NH_2-CS-group.

(v) a D_3 group: a nitro group or a R_1OSO_2-group (R_1 is as defined above);

(vi) an A_2 group:

1) an $A_3\text{-}B_4$-group

[A_3 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 haloalkyl group, or a C2-C10 alkenyl group optionally substituted with a halogen atom, or a C3-C10 alkynyl group optionally substituted with a halogen atom, or a $R_a\text{-}(R_4)_m$-group (R_a represents a phenyl group, a pyridyl group, a furyl group or a thienyl group, optionally substituted with a halogen atom, a C1-C10 alkyl group, a C1-C10 alkoxy group or a nitro group, and R_4 and m are as defined above), or a C1-C10 alkyl group substituted with a (b)-R_4-group ((b) and R_4 are as defined above), a (c)-R_4-group ((c) and R_4 are as defined above), a $R_2\text{-}B_1\text{-}R_4$-group ($R_2$, B_1 and R_4 are as defined above), a $D_4\text{-}R_4$-group (D_4 and R_4 are as defined above), a D_5-group (D_5 is as defined above), a $D_1\text{-}R_4$-group (D_1 and R_4 are as defined above), a D_2-group (D_2 is as defined above), a $D_3\text{-}R_4$-group (D_3 and R_4

are as defined above) or an A_4-SO_2-R_4-group {A_4 is as defined above, and R_4 is as defined above},

B_4 represents an oxy group, a thio group or a -$N((O)_mR_1)$-group (R_1 and m are as defined above), provided that when B_4 is a thio group, A_3 is not a hydrogen atom];

2) a R_1-B_4-CO-R_4-B_4'-group (R_1, B_4 and R_4 are as defined above, B_4' is the same as or different from B_4, and has the same meaning as that of B_4 provided that when B_4 is a thio group, R_2 is not a hydrogen atom) or a D_2-R_4-B_4-group (D_2, R_4 and B_4 are as defined above);

3) a R_2-SO_2-NR_1-group (R_2 is as defined above provided that a hydrogen atom is excluded, and R_1 is as defined above),

4) a (b)-group ((b) is as defined above);

5) a (c)-group ((c) is as defined above); or

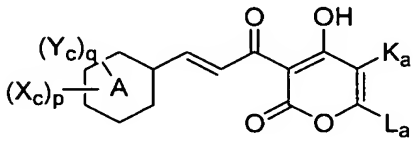
6) a R_1A_1N-NR_1'-group (R_1, A_1 and R_1' are as defined above);

IV. K_a represents a hydrogen atom, a halogen atom or a C1-C10 alkyl group, L_a represents a hydrogen atom, a C1-C10 alkyl group or a M_b-group (M_b is as defined above), or K_a and L_a may form a C1-C10 alkylene group, provided that when an A ring is a benzene ring, p is 2, 3 or 4 in the case that q is 0; and

the "as defined above" in the same symbol between a plurality of substituents indicates that the plurality of substituents independently represent the same meaning as that described above and, between the plurality of

substituents, a selection range of selected substituents is the same, while the selected substituents may be the same or different as far as they are selected in the range];

6. A 2H-pyran-2-one compound represented by the formula (VI):



(VI)

[wherein

I. A represents a benzene ring or a pyridine ring;

II. In $(X_c)_p$, X_c is a substituent on a carbon atom, and represents a hydroxyl group, or a halogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom or a C1-C10 alkoxy group, or a C2-C10 alkenyl group, or a R'-$S(O)_1$-group (R' represents a C1-C10 alkyl group, and 1 represents 0, 1 or 2), or a cyano group, or a C1-C10 alkoxycarbonyl group, or an aminocarbonyl group, or a $(R')_2N$-group (R' is as defined above), or a R'CO-NH-group (R' is as defined above), or a nitro group, or a C1-C10 alkoxy group, or a RB-group (R represents a C1-C10 haloalkyl group, and B represents an oxy group or a thio group), p represents 0, 1, 2, 3 or 4 and, when p is 2 or more, X_c's are the same or different;

III. In $(Y_c)_q$, Y_c is a substituent on a carbon atom, and represents a substituent of the following X_3 group or Y_3

group, q represents 0, 1, 2, 3, 4 or 5, when q is 2 or more, Y_c's are the same or different and, when q is 2 or more, the adjacent two same or different Y_c's constitute a group of a Z_3 group, and may be fused with an A ring;

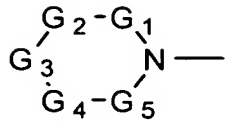
(1) a X_3 group:

a M_a-group [M_a represents a R_b-group (R_b represents a C1-C10 alkyl group substituted with a halogen atom), a halogen atom, a nitro group, a cyano group, a hydroxy group, a R_c-B_a-R_d-group (R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-C10 alkylene group), a HOR_d-group (R_d is as defined above), a R_e-CO-R_d-group (R_e represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, and R_d is as defined above), a R_e-CO-O-R_d-group (R_e and R_d are as defined above), a R_eO-CO-R_d-group (R_e and R_d are as defined above), a HO-CO-CH=CH-group, a $R_eR_e'N$-R_d-group (R_e and R_e' are the same or different, R_e is as defined above, R_e' has the same meaning as that of R_e, and R_d is as defined above), a R_e-CO-NR_e'-R_d-group (R_e, R_e' and R_d are as defined above), a R_bO-CO-N(R_e)-R_d-group (R_b, R_e and R_d are as defined above), a $R_eR_e'N$-CO-R_d-group (R_e, R_e' and R_d are as defined above), a $R_eR_e'N$-CO-NR_e''-R_d-group (R_e, R_e' and R_e'' are the same or different, R_e and R_e' are as defined above, R_e'' has the same

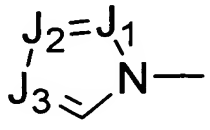
meaning as that of R_e, and R_d is as defined above), a $R_eR_e'N-C(=NR_e'')-NR_e'''-R_d$-group ($R_e$, R_e', R_e'' and R_e''' are the same or different, R_e, R_e' and R_e'' are as defined above, R_e''' has the same meaning as that of R_e, and R_d is as defined above), a $R_b-SO_2-NR_e-R_d$-group (R_b, R_e and R_d are as defined above), a $R_eR_e'N-SO_2-R_d$-group (R_e, R_e' and R_d are as defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl group], provided that when A represents a benzene ring, then a hydroxy group, or a halogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom or a C1-C10 alkoxy group, or a C2-C10 alkenyl group, or a $R'-S(O)_l$-group (R' represents a C1-C10 alkyl group, and l represents 0, 1 or 2), or a cyano group, or a C1-C10 alkoxycarbonyl group, or an aminocarbonyl group, or a $(R')_2N$-group (R' is as defined above), or a R'CO-NH-group (R' is as defined above), or a nitro group or a C1-C10 alkoxy group is excluded;

(2) a Y_3 group:

a M_b-R_d-group [M_b represents a M_c-group {M_c represents a M_d-R_d'-group {M_d represents a phenyl group optionally substituted with a M_a-group (M_a is as defined above), or a pyridyl group optionally substituted with a M_a-group (M_a is as defined above), or a naphthyl group optionally substituted with a M_a-group (M_a is as defined above), or

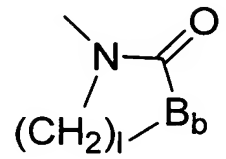
(b) 

a (b)-group {in (b), G_1, G_2, G_4 and G_5 represent a methylene group which is connected to an adjacent atom with a single bond, and may be substituted with a methyl group, or a methine group which is connected to an adjacent atom with a double bond, and may be substituted with a methyl group, and G_3 represents a single bond, or a double bond, or a C1-C10 alkylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1-$group {R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with a halogen atom or a R_2-B_1-group (R_2 represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkynyl group, and B_1 represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group) or a C3-C10 alkenyl group, or a C3-C10 alkynyl group}, or a C2-C10 alkenylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1-$group (R_1 is as defined above)},

(c) 

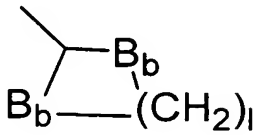
a (c)-group (in (c), J_1, J_2 and J_3 are the same or different,

and represent a methine group optionally substituted with a methyl group, or a nitrogen atom),

(d) 

a (d)-group (l is 2, 3 or 4, and B_b represents an oxy group or a thio group)

or

(e) 

an (e)-group (l and B_b are as defined above), R_d' is the same as or different from R_d, and has the same meaning as that of R_d}}, a M_c-B_a-group (M_c and B_a are as defined above), a M_c-CO-group (M_c is as defined above), a M_c-CO-O-group (M_c is as defined above), a M_cO-CO-group (M_c is as defined above), a M_cR_eN-group (M_c and R_e are as defined above), a M_c-CO-NR_e-group (M_c and R_e are as defined above), a M_cO-CO-NR_e-group (M_c and R_e are as defined above), a M_cR_eN-CO-group (M_c and R_e are as defined above), a M_cR_eN-CO-NR_e'-group (M_c, R_e and R_e' are as defined above), a M_cR_eN-C(=NR_e')-NR_e''-group (M_c, R_e, R_e' and R_e'' are as defined above), a M_c-SO_2-NR_e-group (M_c and R_e are as defined above) or a M_cR_eN-SO_2-group (M_c and R_e are as defined above), and R_d is as defined above], provided that when P is 0, then a morpholino group, or a phenyl group, or a phenoxy group substituted with a

trifluoromethyl group, or a phenoxy group substituted with single or plural halogen atoms is excluded;

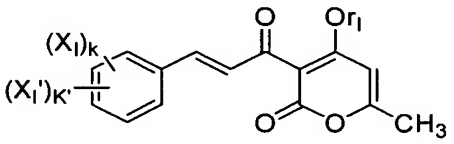
(3) a Z_3 group:

a $-N=C(Y_a)-Y_a'-$group (Y_a represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, or a C1-C10 alkoxy group, and Y_a' represents an oxy group, or a thio group, or an imino group optionally substituted with a C1-C10 alkyl group), a $-Y_b-Y_b'-Y_b''-$group (Y_b and Y_b'' are the same or different, and represent a methylene group, or an oxy group, or a thio group, or a sulfinyl group, or an imino group optionally substituted with a C1-C10 alkyl group, and Y_b' represents a C1-C4 alkylene group optionally substituted with a halogen atom, or a C1-C4 alkylene group optionally having an oxo group) or a $-Y_c-O-Y_c'-O-$group (Y_c and Y_c' are the same or different, and represent a C1-C10 alkylene group), provided that when p is 0, then Y_c is not fused with an A ring to form a benzo[1,3]dioxol ring;

IV. K_a represents a hydrogen atom, a halogen atom or a C1-C10 alkyl group, L_a represents a hydrogen atom, a C1-C10 alkyl group or a M_b-group (M_b is as defined above), or K_a and L_a may form a C1-C10 alkylene group, provided that when an A ring is a benzene ring, then q is not 0 and, when an A ring is a benzene ring or a pyridine ring, then p and q are not 0 at the same time, in either case; and

the "as defined above" in the same symbol between a plurality of substituents indicates that the plurality of substituents independently represent the same meaning as that described above, and between the plurality of substituents, a selection range of selected substituents is the same, while the selected range may be the same or different as far as they are selected in the range];

7. A I type collagen gene transcription suppressing composition, which comprises a 2H-pyran-2-one compound represented by the formula (VII):



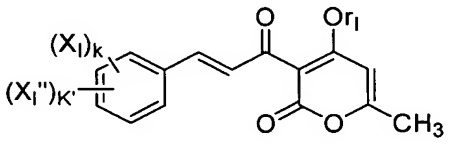
(VII)

[wherein X_I represents a C2-C4 alkenyl group, a C2-C4 alkynyl group, a R_I-$S(O)_l$-group (R_I represents a C1-C4 alkyl group, and l represents an integer of 0 to 2), a cyano group, a carboxy group, a C1-C4 alkoxycarbonyl group, a $(R_I)_2N$-group (R_I is as defined above), a R_I-CO-NH-group (R_I is as defined above), a R_IO-CO-NH-group (R_I is as defined above), a R_INH-CO-NH-group (R_I is as defined above) or a $(R_I')_2N$-CO-group (R_I' represents a hydrogen atom or a C1-C4 alkyl group), X_I' represents a halogen atom, or a C1-C4 alkyl group optionally substituted with a halogen atom or a C1-C4 alkoxy group, or a nitro group, or a C1-C4 alkoxy group, or a RB -group (B represents an oxygen atom or a

sulfur atom, and R represents a C1-C4 alkyl group substituted with a halogen atom), k represents 0 or 1, k' represents an integer of 0 to 4, when k is 0, k' is an integer of 2 to 4 and, when k' is 2 to 4, X_I''s may be different, and r_I is a C1-C4 alkyl group, a C2-C4 alkenyl group or a C2-C4 alkynyl group],

and a inert carrier;

8. A 2H-pyran-2-one compound represented by the formula (VIII):

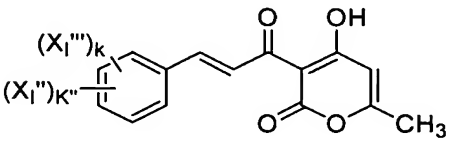


(VIII)

[wherein X_I represents a C2-C4 alkenyl group, a C2-C4 alkynyl group, a R_I-S(O)$_l$-group (R_I represents a C1-C4 alkyl group, and l represents an integer of 0 to 2), a cyano group, a carboxy group, a C1-C4 alkoxycarbonyl group, a $(R_I)_2N$-group (R_I is as defined above), a R_I-CO-NH-group (R_I is as defined above), a R_IO-CO-NH-group (R_I is as defined above), a R_INH-CO-NH-group (R_I is as defined above) or $(R_I')_2N$-CO-group (R_I' represents a hydrogen atom or a C1-C4 alkyl group), X_I" represents a halogen atom, or a C1-C4 alkyl group optionally substituted with a halogen atom or a C1-C4 alkoxy group, or a nitro group, or a C2-C4 alkoxy group, or a RB-group (B represents an oxygen atom or a sulfur atom, and R represents a C1-C4 alkyl group

substituted with a halogen atom), k represents 0 or 1, k' represents an integer of 0 to 4, when k is 0, k' is an integer of 2 to 4 and, when k' is 2 to 4, X_I"'s may be different, and r_I is a C1-C4 alkyl group, a C2-C4 alkenyl group or a C2-C4 alkynyl group];

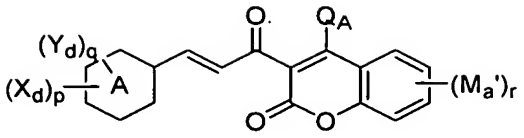
9. A 2H-pyran-2-one compound represented by the formula (IX):



(IX)

[wherein X_I''' represents a C2-C4 alkenyl group, a C2-C4 alkynyl group, a carboxy group, a C2-C4 alkoxycarbonyl group or a $(R_{II})_2N$-group (R_{II} represents a C2-C4 alkyl group), X_I" represents a halogen atom, or a C1-C4 alkyl group optionally substituted with a halogen atom or a C1-C4 alkoxy group, or a nitro group, or a C2-C4 alkoxy group, or a RB-group (B represents an oxygen atom or a sulfur atom, and R represents a C1-C4 alkyl group substituted with a halogen atom), k represents 0 or 1, k" represents an integer of 0 to 2, when k is 0, k" is 2 and, when k" is 2, X"'s are different];

10. A I type collagen gene transcription suppressing composition, which comprises a 2H-1-benzopyran-2-one compound represented by the formula (X):



(X)

[wherein

I. A represents a benzene ring or a pyridine ring;

II. In $(X_d)_p$, X_d is a substituent on a carbon atom, and represents a methoxy group or an ethoxy group, p represents 0, 1, 2, 3 or 4 and, when p is 2 or more, X_d's are the same or different;

III. In $(Y_d)_q$, Y_d is a substituent on a carbon atom, and represents a substituent of the following X_4 group or Y_4 group, q represents 0, 1, 2, 3, 4 or 5, when q is 2 or more, Y_d's are the same or different and, q is 2 or more, the adjacent two same or different Y_d's constitute a group of a Z_4 group, and may be fused with an A ring;

(1) a X_4 group:

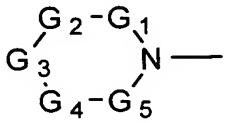
a M_a-group [M_a represents a R_b-group (R_b represents a C1-C10 alkyl group optionally substituted with a halogen atom), a halogen, atom, a nitro group, a cyano group, a hydroxyl group, a R_c-B_a-R_d-group (R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-C10 alkylene group), a HOR_d-group (R_d is as defined above), a R_e-CO-R_d-group (R_e represents a hydrogen atom, or a C1-C10

alkyl group optionally substituted with a halogen atom, and R_d is as defined above), a R_e-CO-O-R_d-group (R_e and R_d are as defined above), a R_eO-CO-R_d-group (R_e and R_d are as defined above), a HO-CO-CH=CH-group, a R_eR_e'N-R_d-group (R_e and R_e' are the same or different, R_e is as defined above, R_e' has the same meaning as that of R_e, and R_d is as defined above), a R_e-CO-NR_e'-R_d-group (R_e, R_e' and R_d are as defined above), a R_bO-CO-N(R_e)-R_d-group (R_b, R_e and R_d are as defined above), a R_eR_e'N-CO-R_d-group (R_e, R_e' and R_d are as defined above), a R_eR_e'N-CO-NR_e''-R_d-group (R_e, R_e' and R_e'' are the same or different, R_e and R_e' are as defined above, R_e'' has the same meaning as that of R_e, and R_d is as defined above), a R_eR_e'N-C(=NR_e'')-NR_e'''-R_d-group (R_e, R_e', R_e'' and R_e''' are the same or different, R_e, R_e' and R_e'' are as defined above, R_e''' has the same meaning as that of R_e, and R_d is as defined above), a R_b-SO_2-NR_e-R_d-group (R_b, R_e and R_d are as defined above), a R_eR_e'N-SO_2-R_d-group (R_e, R_e' and R_d are as defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl group], provided that when A represents a benzene ring, then a methoxy group and an ethoxy group are excluded;

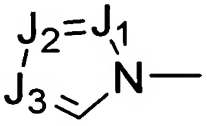
(2) a Y_4 group:

a M_b-R_d-group [M_b represents a M_c-group {M_c represents a M_d-R_d'-group {M_d represents a phenyl group optionally substituted with a M_a-group (M_a is as defined above), or a pyridyl group optionally substituted with a M_a-group (M_a is

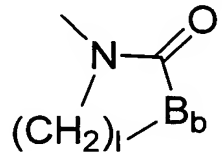
as defined above), or a naphthyl group optionally substituted with a M_a-group (M_a is as defined above), or

(b) 

a (b)-group {in (b), G_1, G_2, G_4 and G_5 represent a methylene group which is connected to an adjacent atom with a single bond, and may be substituted with a methyl group, or a methine group which is connected to an adjacent atom with a double bond, and may be substituted with a methyl group, and G_3 represents a single bond, or a double bond, or a C1-C10 alkylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1-$group {R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group optionally substituted with a halogen atom or a R_2-B_1-group (R_2 represents a C1-C10 alkyl group, a C3-C10 alkenyl group or C3-C10 alkynyl group, and B_1 represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group} or a C2-C10 alkenylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1-$group (R_1 is as defined above)},

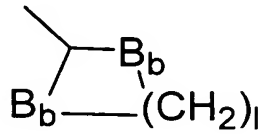
(c) 

a (c)-group (in (c), J_1, J_2 and J_3 are the same or different, and represent a methine group optionally substituted with a methyl group, or a nitrogen atom),

(d) 

a (d)-group (l is 2, 3 or 4, and B_b represents an oxy group or a thio group)

or

(e) 

an (e)-group (l and B_b are as defined above), R_d' is the same as or different from R_d, and has the same meaning as that of R_d}}, a M_c-B_a-group (M_c and B_a are as defined above), a M_c-CO-group (M_c is as defined above), a M_c-CO-O-group (M_c is as defined above), a M_cO-CO-group (M_c is as defined above), a M_cR_eN-group (M_c and R_e are as defined above), a M_c-CO-NR_e-group (M_c and R_e are as defined above), a M_cO-CO-NR_e-group (M_c and R_e are as defined above), a M_cR_eN-CO-group (M_c and R_e are as defined above), a M_cR_eN-CO-NR_e'-group (M_c, R_e and R_e' are as defined above), a M_cR_eN-C(=NR_e')-NR_e''-group (M_c, R_e, R_e' and R_e'' are as defined above), a M_c-SO_2-NR_e-group (M_c and R_e are as defined above) or a M_cR_eN-SO_2-group (M_c and R_e are as defined above), and R_d is as defined above];

(3) a Z_4 group:

a $-N=C(Y_a)-Y_a'$-group (Y_a represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, or a C1-C10 alkoxy group, and Y_a' represents an oxy group, or a thio group, or an imino group optionally substituted with a C1-C10 alkyl group), a $-Y_b-Y_b'-Y_b''$-group (Y_b and Y_b'' are the same or different, a methylene group, or an oxy group, or a thio group, or a sulfinyl group, or an imino group optionally substituted with a C1-C10 alkyl group, and Y_b' represents a C1-C4 alkylene group optionally substituted with a halogen atom, or a C1-C4 alkylene group optionally having an oxo group) or a $-Y_c-O-Y_c'-O-$group (Y_c and Y_c' are the same or different, and represent a C1-C10 alkylene group);

IV. Q_A represents a hydroxyl group, a (b) group ((b) is as defined above), an $A_9-B_6-B_c$-group [A_9 represents a substituent of the following A_7 group or A_8 group, B_6 represents a carbonyl group or a thiocarbonyl group, and B_c represents an oxy group or a $-N((O)_mR_1)-$group (m represents 0 or 1, and R_1 is as defined above), provided that when A_9 is a hydrogen atom, then B_c is not a sulfonyl group], an $A_7''-SO_2-B_c$-group (A_7'' represents a substituent of the following A_7'' group, and B_c is as defined above), an $A_8-SO_2-B_c$-group (A_8 represents a substituent of the following A_8 group, and B_c is as defined above, provided that A_8 is not

a hydrogen atom), a $R_1R_1'N-SO_2-B_c$-group (R_1 is as defined above, R_1' is the same as or different from R_1, and has the same meaning as that of R_1, and B_c is as defined above), a (b)-SO_2-B_c-group ((b) and B_c are as defined above), an $A_9'-B_c$-group (A_9' represents a substituent of the following A_7' group or A_8' group, and B_c is as defined above), a $D_5-R_4-B_c$-group (D_5 represents a substituent of the following D_5 group, R_4 represents a C1-C10 alkylene group, and B_c is as defined above), a $M_c-B_3-B_c$-group (B_3 represents a carbonyl group, a thiocarbonyl group or a sulfonyl group, and M_c and B_c are as defined above) or a M_c-B_c-group (M_c and B_c are as defined above);

(1) an A_7 group:

a C2-C10 alkenyl group optionally substituted with a halogen atom, a C2-C10 alkynyl group, a C3-C10 haloalkynyl group, a $R_2-B_1-R_4$-group (R_2 and B_1 are as defined above, and R_4 is as defined above), a D_4-R_4-group (D_4 represents a substituent of the following D_4 group, and R_4 is as defined above), a D_5-R_4-group (D_5 represents a substituent of the following D_5 group, and R_4 is as defined above), a D_1-R_4-group {D_1 represents a substituent of the following D_1 group, and R_4 is as defined above}, a (b)-R_4-group ((b) is as defined above, and R_4 is as defined above), a (c)-R_4-group ((c) is as defined above, and R_4 is as defined above), a D_2-R_4-group {D_2 represents a substituent of the following

D_2 group, and R_4 is as defined above}, a D_3-R_4-group {D_3 represents a substituent of the following D_3 group, and R_4 is as defined above}, an A_4-SO_2-R_4-group {A_4 represents a (b)-group ((b) is as defined above), a (c)-group ((c) is as defined above) or a $R_1R_1'N$-group (R_1 and R_1' are as defined above), and R_4 is as defined above} or an A_2-CO-R_4-group (A_2 represents a substituent of the following A_2 group, and R_4 is as defined above);

(2) an A_8 group: a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom;

(3) an A_7' group: a C3-C10 alkenyl group optionally substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R_2-B_1-R_4'-group (R_2 and B_1 are as define above, and R_4' represents a C2-C4 alkylene group), a D_4-R_4'-group (D_4 and R_4' are as defined above), a D_1-R_4'-group (D_1 and R_4' are as defined above), a (b)-R_4'-group ((b) and R_4' are as defined above), a (c)-R_4'-group ((c) and R_4' are as defined above), a D_2-R_4-group (D_2 and R_4 are as defined above), a D_3-R_4'-group (D_3 and R_4' are as defined above) or an A_2-CO-R_4-group (A_2 and R_4 are as defined above);

(4) an A_8' group: a C1-C10 alkyl group or a C2-C10 haloalkyl group;

(5) an A_7'' group: a C2-C10 alkenyl group, a C3-C10 alkenyl group substituted with a halogen atom, a C3-C10 alkynyl

group optionally substituted with a halogen atom, a R_2-B_1-R_4'-group (R_2, B_1 and R_4' are as defined above), a D_4-R_4'-group (D_4 and R_4' are as defined above), a D_5-R_4-group (D_5 and R_4 are as defined above), a D_1-R_4'-group (D_1 and D_4' are as defined above), a (b)-R_4'-group ((b) and R_4' are as defined above), a (c)-R_4'-group ((c) and R_4' are as defined above), a D_2-R_4-group (D_2 and R_4 are as defined above), a NO_2-R_4-group (R_4 is as defined above) or an A_2-CO-R_4-group (A_2 and R_4 are as defined above);

(i) a D_4 group: a hydroxy group or an A_1-O-group [A_1 represents a R_3-$(CHR_0)_m$-$(B_2$-$B_3)_{m'}$-group {R_3 represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom or a R_2-B_1-group (R_2 and B_1 are as defined above), or a C2-C10 alkenyl group, or C2-C10 alkynyl group, R_0 represents a hydrogen atom, a C1-C10 alkyl group or a C2-C10 haloalkyl group, m is as defined above, B_2 represents a single bond, an oxy group, a thio group or a $-N((O)_mR_1')$-group (R_1' is as defined above, and n represents 0 or 1), B_3 is as defined above, m' represents 0 or 1 and, when B_3 is a sulfonyl group, then m is 0, and R_3 is not a hydrogen atom}];

(ii) a D_5 group: an $O=C(R_3)$-group (R_3 is as defined above), an A_1-$(O)_n$-$N=C(R_3)$-group (A_1, n and R_3 are as defined above), a R_1-B_0-CO-R_4-$(O)_n$-$N=C(R_3)$-group [R_1, R_4, n and R_3 are as defined above, and B_0 represents an oxy group, a thio group

or a $-N((O)_mR_1')$-group (R_1' and m are as defined above)], a $D_2-R_4-(O)_n-N=C(R_3)$-group (D_2, R_4, n and R_3 are as defined above) or a $R_1A_1N-N=C(R_3)$-group (R_1, A_1 and R_3 are as defined above);

(iii) a D_1 group: a $(R_1-(O)_k-)A_1N-(O)_k'$-group (R_1 and A_1 are as defined above, and k and k' are the same or different, and represent 0 or 1);

(iv) a D_2 group: a cyano group, a $R_1R_1'NC(=N-(O)_n-A_1)$-group (R_1, R_1', n and A_1 are as defined above), an $A_1N=C(-OR_2)-$ group (A_1 and R_2 are as defined above) or a NH_2-CS-group;

(v) a D_3 group: a nitro group or a R_1OSO_2-group (R_1 is as defined above);

(vi) an A_2 group:

1) an A_3-B_4-group

[A_3 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 haloalkyl group, or a C2-C10 alkenyl group optionally substituted with a halogen atom, or a C3-C10 alkynyl group optionally substituted with a halogen atom, or a $R_a-(R_4)_m$-group (R_a represents a phenyl group, a pyridinyl group, a furyl group or a thienyl group, optionally substituted with a halogen atom, a C1-C10 alkyl group, a C1-C10 alkoxy group or a nitro group, and R_4 and m are as defined above), or a C1-C10 alkyl group substituted with a (b)-R_4-group ((b) and R_4 are as defined above), a (c)-R_4-group ((c) and R_4 are as defined above), a $R_2-B_1-R_4-$

group (R_2, B_1 and R_4 are as defined above), a D_4-R_4-group (D_4 and R_4 are as defined above), a D_5-group (D_5 is as defined above), a D_1-R_4-group (D_1 and R_4 are as defined above), a D_2-group (D_2 is as defined above), a D_3-R_4-group (D_3 and R_4 are as defined above) or an A_4-SO_2-R_4-group {A_4 is as defined above, and R_4 is as defined above},

B_4 represents an oxy group, a thio group or a -$N((O)_mR_1)$-group (R_1 and m are as defined above), provided that when B_4 is a thio group, then A_3 is not a hydrogen atom];

2) a R_1-B_4-CO-R_4-B_4'-group (R_1, B_4 and R_4 are as defined above, B_4' is the same as or different from B_4, and has the same meaning as that of B_4, provided that when B_4 is a thio group, then R_2 is not a hydrogen atom) or a D_2-R_4-B_4-group (D_2, R_4 and B_4 are as defined above);

3) a R_2-SO_2-NR_1-group (R_2 is as defined above, provided that a hydrogen atom is excluded, and R_1 is as defined above),

4) a (b)-group ((b) is as defined above);

5) a (c)-group ((c) is as defined above) or

6) a R_1A_1N-NR_1'-group (R_1, A_1 and R_1' are as defined above);

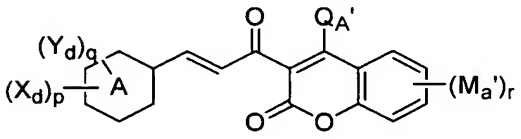
V. M_a' is the same as or different from M_a, and has the same meaning as that of M_a, and r represents 0, 1, 2, 3 or 4, provided that when an A ring is a benzene ring, in case that q and r are 0, then p is 2, 2, 3 or 4; and

the "as defined above" in the same symbol between a

plurality of substituent indicates that the plurality of the substituents independently represent the same meaning as that of described above and, between the plurality of substituents, a selection range of the selected substituents is the same, while the selected substituents may be the same or different as far as they are selected in the range];

and an inert carrier;

11. A 2H-1-benzopyran-2-one compound represented by the formula (XI):



(XI)

[wherein

I. A represents a benzene ring or a pyridine ring;

II. In $(X_d)_p$, X_d is a substituent on a carbon atom, and represents a methoxy group or an ethoxy group, p represents 0, 1, 2, 3 or 4 and, when p is 2 or more, X_d's are the same or different;

III. In $(Y_d)_q$, Y_d is a substituent on a carbon atom, and represents a substituent of the following X_4 group or Y_4 group, q represents 0, 1, 2, 3, 4 or 5, when q is 2 or more, Y_d's are the same or different and, when q is 2 or more, the adjacent two same or different Y_d's constitute a group of a Z_4 group, and may be fused with an A ring;

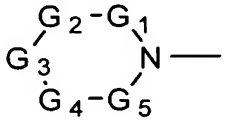
(1) a X_4 group:

a M_a-group [M_a represents a R_b-group (R_b represents a C1-C10 alkyl group optionally substituted with a halogen atom), a halogen atom, a nitro group, a cyano group, a hydroxy group, a R_c-B_a-R_d-group (R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-C10 alkylene group), a HOR_d-group (R_d is as defined above), a R_e-CO-R_d-group (R_e represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, and R_d is as defined above), a R_e-CO-O-R_d-group (R_e and R_d are as defined above), a R_eO-CO-R_d-group (R_e and R_d are as defined above), a HO-CO-CH=CH-group, a $R_eR_e'N$-R_d-group (R_e and R_e' are the same or different, R_e is as defined above, R_e' has the same meaning as that of R_e, and R_d is as defined above), a R_e-CO-NR_e'-R_d-group (R_e, R_e' and R_d are as defined above), a R_bO-CO-N(R_e)-R_d-group (R_b, R_e and R_d are as defined above), a $R_eR_e'N$-CO-R_d-group (R_e, R_e' and R_d are as defined above), a $R_eR_e'N$-CO-NR_e''-R_d-group (R_e, R_e' and R_e'' are the same or different, R_e and R_e' are as defined above, R_e'' has the same meaning as that of R_e, and R_d is as defined above), a $R_eR_e'N$-C(=NR_e'')-NR_e'''-R_d-group (R_e, R_e', R_e'' and R_e''' are the same or different, R_e, R_e' and R_e'' are as defined above, R_e''' has the same meaning as that of R_e, and R_d is as

defined above), a R_b-SO_2-NR_e-R_d-group (R_b, R_e and R_d are as defined above), a $R_eR_e'N$-SO_2-R_d-group (R_e, R_e' and R_d are as defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl group], provided that when A represents a benzene ring, then a methoxy group and an ethoxy group are excluded;

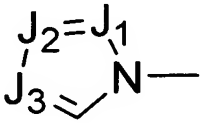
(2) Y_4 group:

a M_b-R_d-group [M_b represents a M_c-group {M_c represents a M_d-R_d'-group {M_d represents a phenyl group optionally substituted with a M_a-group (M_a is as defined above), a pyridyl group optionally substituted with a M_a-group (M_a is as defined above), or a naphthyl group optionally substituted with a M_a-group (M_a is as defined above), or

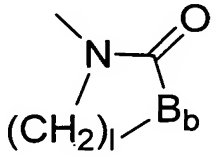
(b) 

a (b)-group {in (b), G_1, G_2, G_4 and G_5 represent a methylene group which is connected to an adjacent atom with a single bond, and may be substituted with a methyl group, or a methine group which is connected to an adjacent atom with a double bond, and may be substituted with a methyl group, and G_3 represents a single bond, or a double bond, or a C1-C10 alkylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1$-group {R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group

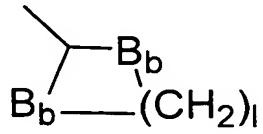
substituted with a halogen atom or a R_2-B_1-group (R_2 represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkynyl group, and B_1 represents an oxy group, a thio group, sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group}, or a C2-C10 alkenylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1$-group (R_1 is as defined above)},

(c) 

a (c)-group (in (c), J_1, J_2, and J_3 are the same or different and, represent a methine group optionally substituted with a methyl group, or a nitrogen atom),

(d) 

a (d)-group (l is 2, 3 or 4, and B_b represents an oxy group or a thio group) or

(e) 

an (e)-group (l and B_b are as defined above), R_d' is the same as or different from R_d, and has the same meaning as that of R_d}}, a M_c-B_a-group (M_c and B_a are as defined above), a M_c-CO-group (M_c is as defined above), a M_c-CO-O-group (M_c

is as defined above), a M_cO-CO-group (M_c is as defined above), a M_cR_eN-group (M_c and R_e are as defined above), a M_c-CO-NR_e-group (M_c and R_e are as defined above), a M_cO-CO-NR_e-group (M_c and R_e are as defined above), a M_cR_eN-CO-group (M_c and R_e are as defined above), a M_cR_eN-CO-NR_e'-group (M_c, R_e and R_e' are as defined above), a M_cR_eN-C(=NR_e')-NR_e''-group (M_c, R_e, R_e' and R_e'' are as defined above), a M_c-SO_2-NR_e-group (M_c and R_e are as defined above) or a M_cR_eN-SO_2-group (M_c and R_e are as defined above), and R_d is as defined above];

(3) a Z_4 group:

a -N=C(Y_a)-Y_a'-group (Y_a represents a hydrogen atom, or C1-C10 alkyl group optionally substituted with a halogen atom, or a C1-C10 alkoxy group, and Y_a' represents an oxy group, or a thio group, or an imino group optionally substituted with a C1-C10 alkyl group), a -Y_b-Y_b'-Y_b''-group (Y_b and Y_b'' are the same or different, and represent a methylene group, or an oxy group, or a thio group, or a sulfinyl group, or an imino group optionally substituted with a C1-C10 alkyl group, Y_b' represents a C1-C4 alkylene group optionally substituted with a halogen atom, or a C1-C4 alkylene group optionally having an oxo group) or a -Y_c-O-Y_c'-O-group (Y_c and Y_c' are the same or different, and a C1-C10 alkylene group);

IV. Q_A' represents a (b)-group ((b) is as defined above),

an A_9-B_6-BC-group [A_9 represents a substituent of the following A_7 group or A_8 group, B_6 represents a carbonyl group or a thiocarbonyl group, B_c represents an oxy group or a $-N((O)_mR_1)$-group (m represents 0 or 1, and R_1 is as defined above), provided that when A_9 is a hydrogen atom, then B_c is not a sulfonyl group], an A_7"-SO_2-B_c-group (A_7" represents a substituent of the following A_7" group, and B_c is as defined above), an A_8-SO_2-B_c-group (A_8 represents a substituent of the following A_8 group, and B_c is as defined above, provided that A_8 is not a hydrogen atom), a $R_1R_1'N$-SO_2-B_c-group (R_1 is as defined above, R_1' is the same as or different from R_1, and has the same meaning as that of R_1, and B_c is as defined above), a (b)-SO_2-B_c-group ((b) and B_c are as defined above), an A_9'-B_c-group (A_9' represents a substituent of the following A_7' group or A_8' group, and B_c is as defined above), a D_5-R_4-B_c-group (D_5 represents a substituent of the following D_5 group, R_4 represents a C1-C10 alkylene group, and B_c is as defined above), a M_c-B_3-B_c-group (B_3 represents a carbonyl group, a thiocarbonyl group or a sulfonyl group, and M_c and B_c are as defined above) or a M_c-B_c-group (M_c and B_c are as defined above);

(1) an A_7 group :

a C2-C10 alkenyl group optionally substituted with a halogen atom, a C2-C10 alkynyl group, a C3-C10 haloalkynyl group, a R_2-B_1-R_4-group (R_2 and B_1 are as defined above, and

R_4 is as defined above), a D_4-R_4-group (D_4 represents a substituent of the following D_4 group, and R_4 is as defined above), a D_5-R_4-group (D_5 represents a substituent of the following D_5 group, and R_4 is as defined above), a D_1-R_4-group {D_1 represents a substituent of the following D_1 group, and R_4 is as defined above}, a (b)-R_4-group ((b) is as defined above, and R_4 is as defined above), a (c)-R_4-group ((c) is as defined above, and R_4 is as defined above), a D_2-R_4-group {D_2 represents a substituent of the following D_2 group, and R_4 is as defined above}, a D_3-R_4-group {D_3 represents a substituent of the following D_3 group, and R_4 is as defined above}, an A_4-SO_2-R_4-group {A_4 represents a (b)-group ((b) is as defined above), a (c)-group ((c) is as defined above) or a $R_1R_1'N$-group (R_1 and R_1' are as defined above), and R_4 is as defined above} or an A_2-CO-R_4-group (A_2 represents a substituent of the following A_2 group, and R_4 is as defined above);

(2) an A_8 group: a hydrogen atom, or C1-C10 alkyl group optionally substituted with a halogen atom;

(3) an A_7' group: a C3-C10 alkenyl group optionally substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R_2-B_1-R_4'-group (R_2 and B_1 are as defined above, and R_4' represents a C2-C10 alkylene group), a D_4-R_4' group (D_4 and R_4' are as defined above), a D_1-R_4'-group (D_1 and R_4' are as defined

above), a (b)-R_4'-group ((b) and R_4' are as defined above), a (c)-R_4'-group ((c) and R_4' are as defined above), a D_2-R_4-group (D_2 and R_4 are as defined above), a D_3-R_4'-group (D_3 and R_4' are as defined above) or an A_2-CO-R_4-group (A_2 and R_4 are as defined above);

(4) an A_9' group: a C1-C10 alkyl group or a C2-C10 haloalkyl group;

(5) an A_7'' group: a C2-C10 alkenyl group, a C3-C10 alkenyl group substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R_2-B_1-R_4'-group (R_2, B_1 and R_4' are as defined above), a D_4-R_4'-group (D_4 and R_4' are as defined above), a D_5-R_4-group (D_5 and R_4 are as defined above), a D_1-R_4'-group (D_1 and R_4' are as defined above), a (b)-R_4'-group ((b) and R_4' are as defined above), a (c)-R_4'-group ((c) and R_4' are as defined above), a D_2-R_4-group (D_2 and R_4 are as defined above), a NO_2-R_4-group (R_4 is as defined above) or an A_2-CO-R_4-group (A_2 and R_4 are as defined above);

(i) a D_4 group: a hydroxy group or an A_1-O-group [A_1 represents a R_3-$(CHR_0)_m$-$(B_2$-$B_3)_m'$-group {R_3 represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom or a R_2-B_1-group (R_2 and B_1 are as defined above), or a C2-C10 alkenyl group, or a C2-C10 alkynyl group, R_0 represents a hydrogen atom, a C1-C10 alkyl group or a C2-C10haloalkyl group, m is as defined

above, B_2 represents a single bond, an oxy group, a thio group or a $-N((O)_nR_1')-$group (R_1' is as defined above, and n represents 0 or 1), B_3 is as defined above, m' represents 0 or 1 and, when B_3 is a sulfonyl group, then m is 0, and R_3 is not a hydrogen atom}];

(ii) a D_5 group: an $O=C(R_3)-$group (R_3 is as defined above), an $A_1-(O)_n-N=C(R_3)-$group (A_1, n and R_3 are as defined above), a $R_1-B_0-CO-R_4-(O)_n-N=C(R_3)-$group [$R_1$, R_4, n and R_3 are as defined above, and B_0 represents an oxy group, a thio group or a $-N((O)_mR_1')-$group (R_1' and m are as defined above)], a $D_2-R_4-(O)_n-N=C(R_3)-$group (D_2, R_4, n and R_3 are as defined above) or a $R_1A_1N-N=C(R_3)-$group (R_1, A_1 and R_3 are as defined above);

(iii) a D_1 group: a $(R)-(O)_k)A_1N-(O)_k'-$group (R_1 and A_1 are as defined above, and k and k' are the same or different, and represent 0 or 1);

(iv) a D_2 group: a cyano group, a $R_1R_1'NC(=N-(O)_n-A_1)-$group (R_1, R_1', n and A_1 are as defined above), an $A_1N=C-(OR_2)-$group (A_1 and R_2 are as defined above) or a NH_2-CS-group;

(v) a D_3 group: a nitro group or a R_1OSO_2-group (R_1 is as defined above);

(vi) an A_2 group:

1) an A_3-B_4-group

[A_3 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 haloalkyl group, or a C2-C10 alkenyl group

optionally substituted with a halogen atom, or a C3-C10 alkynyl group optionally substituted with a halogen atom, or a R_a-$(R_4)_m$-group (R_a represents a phenyl group, a pyridyl group, a furyl group or a thienyl group, optionally substituted with a halogen atom, a C1-C10 alkyl group, a C1-C10 alkoxy group or a nitro group, and R_4 and m are as defined above), or a C1-C10 alkyl group substituted with a (b)-R_4-group ((b) and R_4 are as defined above), a (c)-R_4-group ((c) and R_4 are as defined above), a R_2-B_1-R_4-group (R_2, B_1 and R_4 are as defined above), a D_4-R_4-group (D_4 and R_4 are as defined above), a D_5-group (D_5 is as defined above), a D_1-R_4-group (D_1 and R_4 are as defined above), a D_2-group (D_2 is as defined above), a D_3-R_4-group (D_3 and R_4 are as defined above) or an A_4-SO_2-R_4-group {A_4 is as defined above, and R_4 is as defined above},

B_4 represents an oxy group, a thio group or a $-N((O)_mR_1)-$ group (R_1 and m are as defined above), provided that when B_4 is a thio group, A_3 is not a hydrogen atom];

2) a R_1-B_4-CO-R_4-B_4'-group (R_1, B_4 and R_4 are as defined above, B_4' is the same as or different from B_4, and has the same meaning as that of B_4, provided that when B_4 is a thio group, R_2 is not a hydrogen atom), or a D_2-R_4-B_4-group (D_2, R_4 and B_4 are as defined above);

3) a R_2-SO_2-NR_1-group (R_2 is as defined above, provided that a hydrogen atom is excluded, and R_1 is as defined above);

4) a (b)-group ((b) is as defined above);

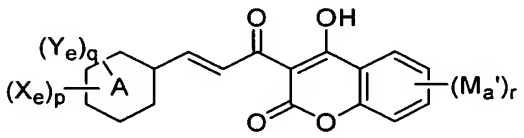
5) a (c)-group ((c) is as defined above) or

6) a R_1A_1N-NR_1'-group (R_1, A_1 and R_1' are as defined above);

V. M_a' is the same as or different from M_a, and has the same meaning as that of M_a, and r represents 0, 1, 2, 3 or 4, provided that when an A ring is a benzene ring, in case that q is 0, then p is 2, 3 or 4; and

the "as defined above" between a plurality of substituents indicates that the plurality of substituents independently represent the same meaning as that described above and, between the plurality of substituents, a selection range of selected substituents is the same, while the selected substituents may be the same or different as far as they are selected in the range];

12. A 2H-1-benzopyran-2-one compound represented by the formula (XII):



(XII)

[wherein

I. A represents a benzene ring or a pyridine ring;

II. In $(X_e)_p$, X_e represents a hydroxy group, a halogen atom, a C1-C10 alkyl group, a R'-S(O)l- group (R' represents a C1-C10 alkyl group, and l represents 0, 1 or 2), a cyano group, a HOCO-CH=CH-group, a $(R')_2N$-group (R' is as defined

above), a R' CO-NH-group (R' is as defined above), a nitro group or a C1-C10 alkoxy group, p represents 0, 1, 2, 3 or 4 and, when p is 2 or more, X_d's are the same or different;

III. In $(Y_e)_q$, Y_e is a substituent on a carbon atom, and represents a substituent of the following X_5 group or Y_5 group, q represents 0, 1, 2, 3, 4 or 5, when q is 2 or more, Y_e's are the same or different and, when q is 2 or more, the adjacent two same or different Y_e's constitute a group of a Z_5 group, and may be fused with an A ring;

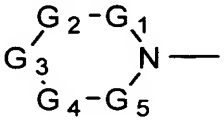
(1) a X_5 group:

a M_a-group [M_a represents a R_b-group (R_b represents a C1-C10 alkyl group optionally substituted with a halogen atom), a halogen atom, a nitro group, a cyano group, a hydroxyl group, a R_c-B_a-R_d-group (R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-C10 alkylene group), a HOR_d-group (R_d is as defined above), a R_e-CO-R_d-group (R_d represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, and R_d is as defined above), a R_e-CO-O-R_d-group (R_e and R_d are as defined above), a R_eO-CO-R_d-group (R_e and R_d are as defined above), a HO-CO-CH=CH-group, a $R_eR_e'N$-R_d-group (R_e and R_e' are the same or different, R_e is as defined above, R_e' has the same meaning as that of R_e, and R_d is as defined above),

a R_e-CO-NR_e'-R_d-group (R_e, R_e' and R_d are as defined above), a R_bO-CO-N(R_e)-R_d-group (R_b, R_e and R_d are as defined above), a R_eR_e'N-CO-R_d-group (R_e, R_e' and R_d are as defined above), a R_eR_e'N-CO-NR_e"-R_d-group (R_e, R_e' and R_e" are the same or different, R_e and R_e' are as defined above, R_e" has the same meaning as that of R_e, and R_d is as defined above), a R_eR_e'N-C(=NR_e")-NR_e"'-R_d-group (R_e, R_e', R_e" and R_e"' are the same or different, R_e, R_e' and R_e" are as defined above, R_e"' has the same meaning as that of R_e, and R_d is as defined above), a R_b-SO_2-NR_e-R_d-group (R_b, R_e and R_d are as defined above), a R_eR_e'N-SO_2-R_d-group (R_e, R_e' and R_d are as defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl group], provided that when A represents a benzene ring, then a X_e-group (X_e is as defined above) is excluded;

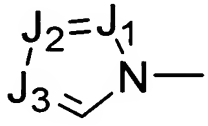
(2) a Y_5 group:

a M_b-R_d-group [M_b represents a M_c-group {M_c represents a M_d-R_d'-group {M_d represents a phenyl group optionally substituted with a M_a-group (M_a is as defined above), or a pyridyl group optionally substituted with a M_a-group (M_a is as defined above), or a naphthyl group optionally substituted with a M_a-group (M_a is as defined above), or

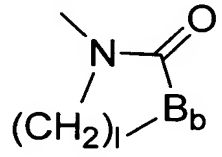
(b) 

a (b)-group {in (b), G_1, G_2, G_4 and G_5 represent a methylene

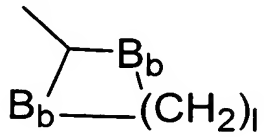
group which is connected to an adjacent atom with a single bond, and may be substituted with a methyl group, or a methine group which is connected to an adjacent atom with a double bond, and may be substituted with a methyl group, and G_3 represents a single bond, or a double bond, or a C1-C10 alkylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1-$group {R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with a halogen atom or a R_2-B_1-group (R_2 represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkynyl group, and B_1 represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group}, or a C2-C10 alkenylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1-$group (R_1 is as defined above)},

(c) 

a (c)-group (in (c), J_1, J_2 and J_3 are the same or different, and represent a methine group optionally substituted with a methyl group, or a nitrogen atom),

(d) 

a (d)-group (l is 2, 3 or 4, and B_b represents an oxy group or a thio group) or

(e) 

an (e)-group (l and B_b are as defined above), R_d' is the same as or different from R_d, and has the same meaning as that of R_d}}, a M_c-B_a-group (M_c and B_a are as defined above), a M_c-CO-group (M_c is as defined above), a M_c-CO-O-group (M_c is as defined above), a M_cO-CO-group (M_c is as defined above), a M_cR_eN-group (M_c and R_e are as defined above), a M_c-CO-NR_e-group (M_c and R_e are as defined above), a M_cO-CO-NR_e-group (M_c and R_e are as defined above), a M_cR_eN-CO-group (M_c and R_e are as defined above), a M_cR_eN-CO-NR_e'-group (M_c, R_e and R_e' are as defined above), a M_cR_eN-C(=NR_e')-NR_e-group (M_c, R_e, R_e' and R_e'' are as defined above), a M_c-SO_2-NR_e-group (M_c and R_e are as defined above) or a M_cR_eN-SO_2-group (M_c and R_e are as defined above), and R_d is as defined above];

(3) a Z_5 group:

a -N=C(Y_a)-Y_a'-group (Y_a represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, or a C1-C10 alkoxy group, and Y_a' represents an oxy group, or a thio group, or an imino group optionally substituted with a C1-C10 alkyl group), a -Y_b-Y_b'-Y_b''-group

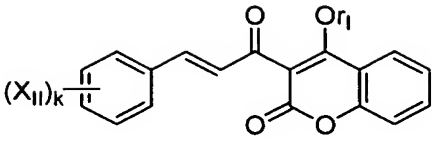
(Y_b and Y_b" are the same or different, and represent a methylene group, or an oxy group, or a thio group, or a sulfinyl group, or an imino group optionally substituted with a C1-C10 alkyl group, and Y_b' represents a C1-C4 alkylene group optionally substituted with a halogen atom, or a C1-C4 alkylene group optionally having an oxo group) or a $-Y_c-O-Y_c'-O-$group (Y_c and Y_c' are the same or different, and represent a C1-C10 alkylene group), provided that when p is 0, then Y_e is not fused with an A ring to form a benzo[1,3]dioxol ring;

IV. M_a' is the same as or different from M_a, and has the same meaning as that of M_a, and r represents 0, 1, 2, 3 or 4, provided that when an A ring is a benzene ring, then q is not 0; and

the "as defined above" in the same symbol between a plurality of substituents indicates that the plurality of substituents independently represent the same meaning as that described above and, between the plurality of substituents, a selection range of selected substituents is the same, while the selected substituents may be the same or different as far as they are selected in the range];

13. A 2H-1-benzopyran-2-one compound represented by the formula (XIII):

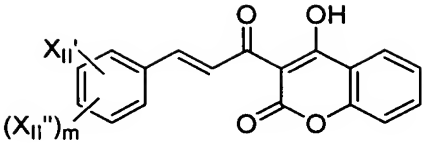
(XIII)



[wherein X_{II} represents a hydrogen atom, or a hydroxyl group, or a halogen atom, or a C1-C4 alkyl group optionally substituted with a halogen atom or a C1-C4 alkoxy group, or a C2-C4 alkenyl group, or a C2-C4 alkynyl group, or a C3-C4 alkoxy group, or a R_I-$S(O)_l$-group (R_I represents a C1-C4 alkyl group, and l represents an integer of 0 to 2), or a nitro group, or a cyano group, or a carboxy group, or a C1-C4 alkoxycarbonyl group, or a $(R_I)_2N$-group (R_I is as defined above), or a R_I-CO-N_I-group (R_I is as defined above), or a R_IO-CO-NH-group (R_I is as defined above), or a R_INH-CO-NH-group (R_I is as defined above), or a $(R_I')_2N$-CO-group (R_I' represents a hydrogen atom or a C1-C4 alkyl group), or a RB-group (B represents an oxygen atom or a sulfur atom, and R represents a C1-C4 alkyl group substituted with a halogen atom), k represents an integer of 1 to 4 and, when k is an integer of 2 to 4, X_{II}'s may be different, and r_I represents a C1-C4 alkyl group, a C2-C4 alkenyl group or a C2-C4 alkynyl group];

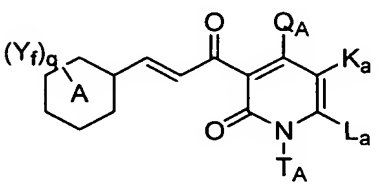
14. A 2H-1-benzopyran-2-one compound represented by the formula (XIV):

(XIV)



[wherein X_{II}' represents a C1-C4 alkyl group substituted with a halogen atom or a C1-C4 alkoxy group, a C2-C4 alkenyl group, a C2-C4 alkynyl group, a C3-C4 alkoxy group, a R_{II}-$S(O)_l$-group (R_{II} represents a C2-C4 alkyl group, and l represents an integer of 0 to 2), a cyano group, a carboxy group, a C_1-C4 alkoxycarbonyl group, a $(R_{II})_2N$-group (R_{II} is as defined above), a R_I-CO-NH-group (R_I represents a C1-C4 alkyl group), a R_IO-CO-NH-group (R_I is as defined above), a R_INH-CO-NH-group (R_I is as defined above), a $(R_I')_2N$-CO-group (R_I' represents a hydrogen atom or a C1-C4 alkyl group) or a RB-group (B represents an oxygen atom or a sulfur atom, and R represents a C1-C4 alkyl group substituted with a halogen atom), X_{II}'' represents a hydrogen atom, a halogen atom, a C1-C4 alkyl group or a C3-C4 alkoxy group, m represents 1 or 2 and, when m is 2, X_{II}'''s may be different];

15. A I type collagen gene transcription suppressing composition, which comprises a 2(1H)-pyridinone compound represented by the formula (XV):



(XV)

[wherein

I. A represents a benzene ring or a pyridine ring;

II. In $(Y_f)_q$, Y_f is a substituent on a carbon atom, and represents a group of the following X group or Y group, q represents 0, 1, 2, 3, 4 or 5, when q is 2 or more, Y_f's are the same or different and, when q is 2 or more, the adjacent two same or different Y_f's constitutes a group of a Z group, and may be fused with an A ring;

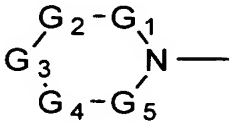
(1) a X group:

a M_a-group [M_a represents a R_b-group (R_b represents a C1-C10 alkyl group optionally substituted with a halogen atom), a halogen atom, a nitro group, a cyano group, a hydroxy group, a R_c-B_a-R_d-group (R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-C10 alkylene group), a HOR_d-group (R_d is as defined above), a R_e-CO-R_d-group (R_e represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, and R_d is as defined above), a R_e-CO-O-R_d-group (R_e and R_d are as defined above), a R_eO-CO-R_d-group (R_e and R_d are as defined above), a HO-CO-CH=CH-group, a $R_eR_e'N$-R_d-group (R_e and R_e' are the same or different, R_e is as defined above, R_e' has the same meaning as that of R_e, and R_d is as defined above),

a R_e-CO-NR_e'-R_d-group (R_e, R_e' and R_d are as defined above), a R_bO-CO-N(R_e)-R_d-group (R_b, R_e and R_d are as defined above), a R_eR_e'N-CO-R_d-group (R_e, R_e' and R_d are as defined above), a R_eR_e'N-CO-NR_e"-R_d-group (R_e, R_e' and R_e" are the same or different, R_e and R_e' are as defined above, R_e" has the same meaning as that of R_e, and R_d is as defined above), a R_eR_e'N-C(=NR_e")-NR_e"'-R_d-group (R_e, R_e', R_e" and R_e"' are the same or different, R_e, R_e' and R_e" are as defined above, R_e"' has the same meaning as that of R_e, and R_d is as defined above), a R_b-SO_2-NR_e-R_d-group (R_b, R_e and R_d are as defined above), a R_eR_e'N-SO_2-R_d-group (R_e, R_e' and R_d are as defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl group];

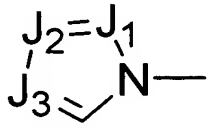
(2) a Y group:

a M_b-R_d-group [M_b represents a M_c-group {M_c represents a M_d-R_d'-group {M_d represents a phenyl group optionally substituted with a M_a-group (M_a is as defined above), or a pyridyl group optionally substituted with a M_a-group (M_a is as defined above), or a naphthyl group optionally substituted with a M_a-group (M_a is as defined above), or

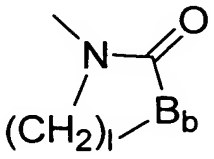
(b) 

a (b)-group {in (b), G_1, G_2, G_4 and G_5 represent a methylene group which is connected to an adjacent atom with a single

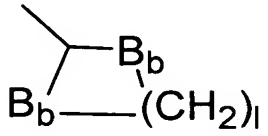
bond, and may be substituted with a methyl group, or a methine group which is connected to an adjacent atom with a double bond, and may be substituted with a methyl group, and G_3 represents a single bond, or a double bond, or a C1-C10 alkylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1-$group {R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with a halogen atom or a R_2-B_1-group (R_2 represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkynyl group, and B_1 represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group}, or a C2-C10 alkenylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1-$group (R_1 is as defined above)},

(c) 

a (c)-group (in (c), J_1, J_2 and J_3 are the same or different, and represent a methine group optionally substituted with a methyl group, or a nitrogen atom),

(d) 

a (d)-group (l is 2, 3 or 4, and B_b represents an oxy group or a thio group) or

(e) 

an (e)-group (l and B_b are as defined above), R_d' is the same as or different from R_d, and has the same meaning as that of R_d}}, a M_c-B_a-group (M_c and B_a are as defined above), a M_c-CO-group (M_c is as defined above), a M_c-CO-O-group (M_c is as defined above), a M_cO-CO-group (M_c is as defined above), a M_cR_eN-group (M_c and R_e are as defined above), a M_c-CO-NR_e-group (M_c and R_e are as defined above), a M_cO-CO-NR_e-group (M_c and R_e are as defined above), a M_cR_eN-CO-group (M_c and R_e are as defined above), a M_cR_eN-CO-NR_e'-group (M_c, R_e and R_e' are as defined above), a M_cR_eN-C(=NR_e')-NR_e''-group (M_c, R_e, R_e' and R_e'' are as defined above), a M_c-SO_2-NR_e-group (M_c and R_e are as defined above) or a M_cR_eN-SO_2-group (M_c and R_e are as defined above), and R_d is as defined above];

(3) a Z group: a -N=C(Y_a)-Y_a'-group (Y_a represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, or a C1-C10 alkoxy group, and Y_a' represents an imino group optionally substituted with an oxy group, or a thio group, or a C1-C10 alkyl group), a -Y_b-Y_b'-Y_b''-group (Y_b and Y_b'' are the same or

different, and represent a methylene group, or an oxy group, or a thio group, or a sulfinyl group, or an imino group optionally substituted with a C1-C10 alkyl group, and Y_b' represents a C1-C4alkylene group optionally substituted with a halogen atom, or a C1-C4alkylene group optionally having an oxo group), or a $-Y_c-O-Y_c'-O-$group (Y_c and Y_c' are the same or different, and represent a C1-C10 alkylene group);

III. Q_A represents a hydroxyl group, a (b)-group ((b) is as defined above), an $A_9-B_6-B_c$-group [A_9 represents a substituent of the following A_7 group or A_8 group, B_6 represents a carbonyl group or a thiocarbonyl group, and B_c represents an oxy group or a $-N((O)_mR_1)-$group (m represents 0 or 1, and R_1 is as defined above), provided that when A_9 is a hydrogen atom, then B_c is not a sulfonyl group], an $A_7''-SO_2-B_c$-group (A_7'' represents a substituent of the following A_7'' group, and B_c is as defined above), an $A_8-SO_2-B_c$-group (A_8 represents a substituent of the following A_8 group, and B_c is as defined above, provided that A_8 is not a hydrogen atom), a $R_1R_1'N-SO_2-B_c$ group (R_1 is as defined above, R_1' is the same as or different of R_1, and has the same meaning of R_1, and B_c is as defined above), a (b)$-SO_2-B_c$-group ((b) and B_c are as defined above), an $A_9'-B_c$-group (A_9' represents a substituent of the following A_7' group or a A_8' group, and B_c is as defined above), a $D_5-R_4-B_c$-group

(D_5 represents a substituent of the following D_5 group, R_4 represents a C1-C10 alkylene group, and B_c is as defined above), a M_c-B_3-B_c-group (B_3 represents a carbonyl group, a thiocarbonyl group or a sulfonyl group, and M_c and B_c are as defined above) or a Mc-B_c-group (M_c and B_c are as defined above);

(1) an A_7 group:

a C2-C10 alkenyl group optionally substituted with a halogen atom, a C2-C10 alkynyl group, a C3-C10 haloalkynyl group, a R_2-B_1-R_4-group (R_2 and B_1 are as defined above, and R_4 is as defined above), a D_4-R_4-group (D_4 represents a substituent of the following D_4 group, and R_4 is as defined above), a D_5-R_4-group (D_5 represents a substituent of the following D_5 group, and R_4 is as defined above), a D_1-R_4-group {D_1 represents a substituent of the following D_1 group, and R_4 is as defined above}, a (b)-R_4-group ((b) is as defined above, and R_4 is as defined above), a (c)-R_4-group ((c) is as defined above, and R_4 is as defined above), a D_2-R_4-group {D_2 represents a substituent of the following D_2 group, and R_4 is as defined above}, a D_3-R_4-group {D_3 represents a substituent of the following D_3 group, and R_4 is as defined above}, an A_4-SO_2-R_4-group {A_4 represents a (b)-group ((b) is as defined above), a (c)-group ((c) is as defined above) or a $R_1R_1'N$-group (R_1 and R_1' are as defined above), and R_4 is as defined above} or an A_2-CO-R_4-group (A_2

represents a substituent of the following A_2 group, and R_4 is as defined above);

(2) an A_8 group: a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom;

(3) an A_7' group: a C3-C10 alkenyl group optionally substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R_2-B_1-R_4'-group (R_2 and B_1 are as defined above, and R_4' represents a C2-C10 alkylene group), a D_4-R_4'-group (D_4 and R_4' are as defined above), a D_1-R_4'-group (D_1 and R_4' are as defined above), a (b)-R_4'-group ((b)and R_4' are as defined above), a (c)-R_4'-group ((c) and R_4' are as defined above), a D_2-R_4-group (D_2 and R_4 are as defined above), a D_3-R_4'-group (D_3 and R_4' are as defined above) or an A_2-CO-R_4-group (A_2 and R_4 are as defined above);

(4) an A_8' group: a C1-C10 alkyl group or a 2-C10 haloalkyl group;

(5) an A_7'' group: a C2-C10 alkenyl group, a C3-C10 alkenyl group substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R_2-B_1-R_4'-group (R_2, B_1 and R_4' are as defined above), a D_4-R_4'-group (D_4 and R_4' are as defined above), a D_5-R_4-group (D_5 and R_4 are as defined above), a D_1-R_4'-group (D_1 and R_4' are as defined above), a (b)-R_4'-group ((b) and R_4' are as defined above), a (c)-R_4'-group ((c) and R_4' are as defined

above), a D_2-R_4-group (D_2 and R_4 are as defined above), a NO_2-R_4-group (R_4 is as defined above) or an A_2-CO-R_4-group (A_2 and R_4 are as defined above);

(i) a D_4 group: a hydroxy group or an A_1-O-group [A_1 represents a R_3-$(CHR_0)_m$-$(B_2$-$B_3)_{m'}$-group {R_3 represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom or a R_2-B_1-group (R_2 and B_1 are as defined above), or a C2-C10 alkenyl group, or a C2-C10 alkynyl group, R_0 represents a hydrogen atom, a C1-C10 alkyl group or a C2-C10 haloalkyl group, m is as defined above, B_2 represents a single bond, an oxy group, a thio group or a $-N((O)_nR_1')$-group (R_1' is as defined above, and n represents 0 or 1), B_3 is as defined above, m' represents 0 or 1 and, when B_3 is a sulfonyl group, then m is 0, and R_3 is not a hydrogen atom}];

(ii) a D_5 group: an O=C(R_3)-group (R_3 is as defined above), an A_1-$(O)_n$-N=C(R_3)-group (A_1, n and R_3 are as defined above), a R_1-B_0-CO-R_4-$(O)_n$-N=C(R_3)-group [R_1, R_4, n and R_3 are as defined above, and B_0 represents an oxy group, a thio group or a $-N((O)_mR_1')$-group (R_1' and m are as defined above)], a D_2-R_4-$(O)_n$-N=C(R_3)-group (D_2, R_4, n and R_3 are as defined above) or a R_1A_1N-N=C(R_3)-group (R_1, A_1 and R_3 are as defined above);

(iii) a D_1 group: a $(R_1$-$(O)_k$-$)A_1N$-$(O)_{k'}$-group (R_1 and A_1 are as defined above, and k and k' are the same or different,

and represent 0 or 1);

(iv) a D_2 group: a cyano group, a $R_1R_1'NC(=N-(O)_n-A_1)$-group (R_1, R_1', n and A_1 are as defined above), an $A_1N=C(-OR_2)$-group (A_1 and R_2 are as defined above) or a NH_2-CS-group;

(v) a D_3 group: a nitro group or a R_1OSO_2-group (R_1 is as defined above);

(vi) an A_2 group:

1) an A_3-B_4-group

[A_3 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 haloalkyl group, or a C2-C10 alkenyl group optionally substituted with a halogen atom, or a C3-C10 alkynyl group optionally substituted with a halogen atom, or a R_a-$(R_4)_m$-group (R_a represents a phenyl group, a pyridyl group, a furyl group or a thienyl group, optionally substituted with a halogen atom, a C1-C10 alkyl group, a C1-C10 alkoxy group or a nitro group, and R_4 and m are as defined above), or a C1-C10 alkyl group substituted with a (b)-R_4-group ((b) and R_4 are as defined above), a (c)-R_4-group ((c) and R_4 are as defined above)], a R_2-B_1-R_4-group (R_2, B_1 and R_4 are as defined above), a D_4-R_4-group (D_4 and R_4 are as defined above), a D_5-group (D_5 is as defined above), a D_1-R_4-group (D_1 and R_4 are as defined above), a D_2-group (D_2 is as defined above), a D_3-R_4-group (D_3 and R_4 are as defined above) or an A_4-SO_2-R_4-group {A_4 is as defined above, and R_4 is as defined above},

B_4 represents an oxy group, a thio group, or a -$N((O)_mR_1)$-group (R_1 and m are as defined above), provided that when B_4 is a thio group, then A_3 is not a hydrogen atom];

2) a R_1-B_4-CO-R_4-B_4'-group (R_1, B_4 and R_4 are as defined above, B_4' is the same as or different from R_4, and has the same meaning as that of B_4, provided that when R_4 is a thio group, then R_2 is not a hydrogen atom) or a D_2-R_4-B_4-group (D_2, R_4 and B_4 are as defined above);

3) a R_2-SO_2-NR_1-group (R_2 is as defined above, provided that a hydrogen atom is excluded, and R_1 is as defined above);

4) a (b)-group ((b) is as defined above);

5) a (c)-group ((c) is as defined above) or

6) a R_1A_1N-NR_1'-group (R_1, A_1 and R_1' are as defined above);

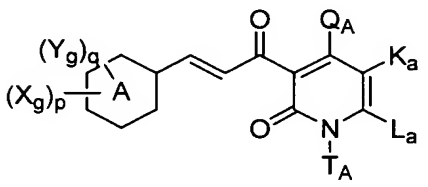
IV. T_A represents a hydrogen atom, an A_9'-group (A_9' is as defined above), a D_5-R_4-group (D_5 and R_4 are as defined above) or a M_c-group (M_c is as defined above);

V. K_a represents a hydrogen atom, a halogen atom or a C1-C10 alkyl group, L_a represents a hydrogen atom, a C1-C10 alkyl group or a M_b-group (M_b is as defined above) or a K_a and L_a may form a C1-C10 alkylene group; and

the "as defined above" in the same symbol between a plurality of substituents indicates that the plurality of substituents independently represent the same meaning as that described above and, between the plurality of

substituents, a selection range of selected substituents is the same, while the selected substituents may be the same or different as far as they are selected in the range]; and an inert carrier;

16. A 2(1H)-pyridinone compound represented by the formula (XVI):



(XVI)

[wherein

I. A represents a benzene ring or a pyridine ring;

II. In $(X_g)_p$, X_g represents a hydroxyl group, a halogen atom, a $(R')_2N$-group (R' represents a C1-C10 alkyl group), a nitro group or a C1-C10 alkoxy group, p represents 0, 1, 2, 3 or 4 and, when p is 2 or more, X_g's are the same or different;

III. In $(Y_g)_q$, Y_g is a substituent on a carbon atom, and represents a group of the following X_6 group or Y_6 group, q represents 0, 1, 2, 3, 4 or 5, when q is 2 or more, Y_g's are the same or different and, when q is 2 or more, the adjacent two same or different Y_g's constitutes a group of a Z_6 group, and may be fused with an A ring;

(1) a X_6 group:

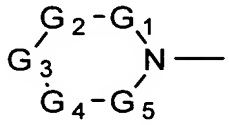
a M_a-group [M_a represents a R_b-group (R_b represents a C1-C10

alkyl group optionally substituted with a halogen atom), a halogen atom, a nitro group, a cyano group, a hydroxyl group, a R_c-B_a-R_d-group (R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-C10 alkylene group), a HOR_d-group (R_d is as defined above), a R_e-CO-R_d-group (R_e represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, and R_d is as defined above), a R_e-CO-O-R_d-group (R_e and R_d are as defined above), a R_eO-CO-R_d-group (R_e and R_d are as defined above), a HO-CO-CH=CH-group, a $R_eR_e'N$-R_d-group (R_e and R_e' are the same or different, R_e is as defined above, R_e' has the same meaning as that of R_e, and R_d is as defined above), a R_e-CO-NR_e'-R_d-group (R_e, R_e' and R_d are as defined above), a R_bO-CO-N(R_e)-R_d-group (R_b, R_e and R_d are as defined above), a $R_eR_e'N$-CO-R_d-group (R_e, R_e' and R_d are as defined above), a $R_eR_e'N$-CO-NR_e''-R_d-group (R_e, R_e' and R_e'' are the same or different, R_e and R_e' are as defined above, R_e'' has the same meaning as that of a R_e, and R_d is as defined above), a $R_eR_e'N$-C(=NR_e'')-NR_e'''-R_d-group (R_e, R_e', R_e'' and R''' are the same or different, R_e, R_e' and R_e'' are as defined above, R_e''' has the same meaning as that of R_e, and R_d is as defined above), a R_b-SO_2-NR_e-R_d-group (R_b, R_e and R_d are as defined above), a $R_eR_e'N$-SO_2-R_d-group (R_e, R_e' and R_d are as

defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl group], provided that when A represents a benzene ring, then a X_g-group (X_g is as defined above) is excluded;

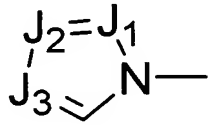
(2) a Y_6 group:

a M_b-R_d-group [M_b represents a M_c-group {M_c represents a M_d-R_d'-group {M_d represents a phenyl group optionally substituted with a M_a-group (M_a is as defined above), or a pyridyl group optionally substituted with a M_a-group (M_a is as defined above), or a naphthyl group optionally substituted with a M_a-group (M_a is as defined above), or

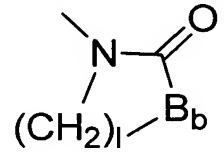
(b) 

a (b)-group {in (b), G_1, G_2, G_4 and G_5 represent a methylene group which is connected to an adjacent atom with a single bond, and may be substituted with a methyl group, or a methine group which is connected to an adjacent atom with a double bond and may be substituted with a methyl group, and G_3 represents a single bond, or a double bond, or a C1-C10 alkylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1$-group {R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with a halogen atom or a R_2-B_1-group (R_2 represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkynyl

group, and B_1 represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group}, or a C2-C10 alkenylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1-$group (R_1 is as defined above)},

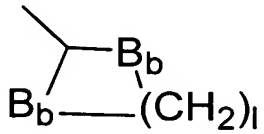
(c) 

a (c)-group (in (c), J_1, J_2 and J_3 are the same or different, and represent a methine group optionally substituted with a methyl group, or a nitrogen atom),

(d) 

a (d)-group (l is 2, 3 or 4, and B_b represents an oxy group or a thio group)

or

(e) 

an (e)-group (l and B_b are as defined above), R_d' is the same as or different from R_d, and has the same meaning as that of R_d}}, a M_c-B_a-group (M_c and B_a are as defined above), a M_c-CO-group (M_c is as defined above), a M_c-CO-O-group (M_c is as defined above), a M_cO-CO-group (M_c is as defined above), a M_cR_eN-group (M_c and R_e are as defined above), a

M_c-CO-NR_e-group (M_c and R_e are as defined above), a M_cO-CO-NR_e-group (M_c and R_e are as defined above), a M_cR_eN-CO-group (M_c and R_e are as defined above), a M_cR_eN-CO-NR_e'-group (M_c, R_e and R_e' are as defined above), a M_cR_eN-C(=NR_e')-NR_e''-group (M_c, R_e, R_e' and R_e'' are as defined above), a M_c-SO_2-NR_e-group (M_c and R_e are as defined above) or a M_cR_eN-SO_2-group (M_c and R_e are as defined above), and R_d is as defined above];

(3) a Z_6 group:

a $-N=C(Y_a)-Y_a'$-group (Y_a represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, or a C1-C10 alkoxy group, and Y_a' represents an oxy group, or a thio group, or an imino group optionally substituted with a C1-C10 alkyl group), a $-Y_b-Y_b'-Y_b''$-group (Y_b and Y_b'' are the same or different, a methylene group, or an oxy group, or a thio group, or a sulfinyl group, or an imino group optionally substituted with a C1-C10 alkyl group, and Y_b' represents a C1-C4alkylene group optionally substituted with a halogen atom, or a C1-C4 alkylene group optionally having an oxo group) or a $-Y_c-O-Y_c'-O$-group (Y_c and Y_c' are the same or different, and represent a C1-C10 alkylene group);

IV. Q_A represents a hydroxyl group, a (b)-group ((b) is as defined above), an A_9-B_6-B_c-group [A_9 represents a substituent of the following A_7 group or A_8 group, B_6

represents a carbonyl group or a thiocarbonyl group, and B_c represents an oxy group or a $-N((O)_mR_1)-$group (m represents 0 or 1, and R_1 is as defined above), provided that when A_9 is a hydrogen atom, then B_c is not a sulfonyl group], an A_7"$-SO_2-B_c-$group (A_7" represents a substituent of the following A_7" group, and B_c is as defined above), an $A_8-SO_2-B_c-$group (A_8 represents a substituent of the following A_8 group, B_1 is as defined above, provided that A_8 is not a hydrogen atom), a $R_1R_1'N-SO_2-B_c-$group (R_1 is as defined above, R_1' is the same as or different from R_1, and has the same meaning as that of R_1, and B_c is as defined above), a (b)$-SO_2-B_c-$group ((b) and B_c are as defined above), an $A_9'-B_c-$group (A_9' represents a substituent of the following A_7' group or A_8' group, and B_c is as defined above), a $D_5-R_4-B_c-$group (D_5 represents a substituent of the following D_5 group, R_4 represents a C1-C10 alkylene group, and B_c is as defined above), a $M_c-B_3-B_c-$group (B_3 represents a carbonyl group, a thiocarbonyl group or a sulfonyl group, and M_c and B_c are as defined above), or a M_c-B_c-group (M_c and B_c are as defined above);

(1) an A_7 group:

a C2-C10 alkenyl group optionally substituted with a halogen atom, a C2-C10 alkynyl group, a C3-C10 haloalkynyl group, a $R_2-B_1-R_4-$group (R_2 and B_1 are as defined above, and R_4 is as defined above), a D_4-R_4-group (D_4 represents a

substituent of the following D_4 group, and R_4 is as defined above), a D_5-R_4-group (D_5 represents a substituent of the following D_5 group, and R_4 is as defined above), a D_1-R_4-group {D_1 represents a substituent of the following D_1 group, and R_4 is as defined above}, a (b)-R_4-group ((b) is as defined above, and R_4 is as defined above), a (c)-R_4-group ((c) is as defined above, and R_4 is as defined above), a D_2-R_4-group {D_2 represents a substituent of the following D_2 group, and R_4 is as defined above}, a D_3-R_4-group {D_3 represents a substituent of the following D_3 group, and R_4 is as defined above}, an A_4-SO_2-R_4-group {A_4 represents a -(b)-group ((b) is as defined above), a (c)-group ((c) is as defined above) or a $R_1R_1'N$-group (R_1 and R_1' are as defined above), and R_4 is as defined above} or an A_2-CO-R_4 group (A_2 represents a substituent of the following A_2 group, and R_4 is as defined above);

(2) an A_8 group: a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom;

(3) an A_7' group: a C3-C10 alkenyl group optionally substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R_2-B_1-R_4'-group (R_2 and B_1 are as defined above, and R_4' represents a C2-C10 alkylene group), a D_4-R_4'-group (D_4 and R_4' are as defined above), a D_1-R_4'-group (D_1 and R_4' are as defined above), a (b)-R_4'-group ((b) and R_4' are as defined above),

a (c)-R_4'-group ((c) and R_4' are as defined above), a D_2-R_4-group (D_2 and R_4 are as defined above), a D_3-R_4'-group (D_3 and R_4' are as defined above), and an A_2-CO-R_4-group (A_2 and R_4 are as defined above);

(4) an A_8' group: a C1-C10 alkyl group or a C2-C10 haloalkyl group;

(5) an A_7'' group: a C2-C10 alkenyl group, a C3-C10 alkenyl group substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R_2-B_1-R_4'-group (R_2, B_1 and R_4' are as defined above), a D_4-R_4'-group (D_4 and R_4' are as defined above), a D_5-R_4-group (D_5 and R_4 are as defined above), a D_1-R_4'-group (D_1 and R_4' are as defined above), a (b)-R_4'-group ((b) and R_4' are as defined above), a (c)-R_4'-group ((c) and R_4' are as defined above), a D_2-R_4-group (D_2 and R_4 are as defined above), a NO_2-R_4-group (R_4 is as defined above) or an A_2-CO-R_4-group (A_2 and R_4 are as defined above);

(i) a D_4 group: a hydroxyl group or an A_1-O-group [A_1 represents a R_3-$(CHR_0)_m$-$(B_2$-$B_3)_{m'}$-group {R_3 represents a hydrogen atom, or a C1-10 alkyl group optionally substituted with a halogen atom or a R_2-B_1-group (R_2 and B_1 are as defined above), or a C1-C10 alkenyl group, or a C2-C10 alkynyl group, R_0 represents a hydrogen atom, a C1-C10 alkyl group or a C2-C10 haloalkyl group, m is as defined above, B_2 represents a single bond, an oxy group, a thio

group or a $-N((O)_nR_1')-$ group (R_1' is as defined above, and n represents 0 or 1), B_3 is as defined above, m' represents 0 or 1 and, when B_3 is a sulfonyl group, m is 0, and R_3 is not a hydrogen atom}];

(ii) a D_5 group: an $O=C(R_3)-$group (R_3 is as defined above), an $A_1-(O)_n-N=C(R_3)-$group (A_1, n and R_3 are as defined above), a $R_1-B_0-CO-R_4-(O)_n-N=C(R_3)-$group [$R_1$, R_4, n and R_3 are as defined above, and B_0 represents an oxy group, a thio group or a $-N((O)_mR_1')-$group (R_1' and m are as defined above)], a $D_2-R_4-(O)_n-N=C(R_3)-$group (D_2, R_4, n and R_3 are as defined above) or a $R_1A_1N-N=C(R_3)-$group (R_1, A_1 and R_3 are as defined above);

(iii) a D_1 group: a $(R_1-(O)_k-)A_1N-(O)_k'-$group (R_1 and A_1 are as defined above, and k and k' are the same or different, and represent 0 or 1);

(iv) a D_2 group: a cyano group, a $R_1R_1'NC(=N-(O)_n-A_1)-$group (R_1, R_1', n and A_1 are as defined above), an $A_1N=C(-OR_2)-$group (A_1 and R_2 are as defined above) or a NH_2-CS-group;

(v) a D_3 group: a nitro group or a R_1OSO_2-group (R_1 is as defined above);

(vi) an A_2 group:

1) an A_3-B_4-group

[A_3 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 haloalkyl group, or a C2-C10 alkenyl group optionally substituted with a halogen atom, or a C3-C10

alkynyl group optionally substituted with a halogen atom, or a R_a-$(R_4)_m$-group (R_a represents a phenyl group, a pyridyl group, a furyl group or a thienyl group, optionally substituted with a halogen atom, a C1-C10 alkyl group a C1-C10 alkoxy group or a nitro group, and R_4 and m are as defined above), or a C1-C10 alkyl group substituted with a (b)-R_4-group ((b) and R_4 are as defined above), a (c)-R_4-group ((c) and R_4 are as defined above), a R_2-B_1-R_4-group (R_2, B_1 and R_4 are as defined above), a D_4-R_4-group (D_4 and R_4 are as defined above), a D_5-group (D_5 is as defined above), a D_1-R_4-group (D_1 and R_4 are as defined above), a D_2-group (D_2 is as defined above), a D_3-R_4-group (D_3 and R_4 are as defined above) or an A_4-SO_2-R_4-group {A_4 is as defined above, and R_4 is as defined above},

B_4 represents an oxy group, a thio group or a -N($(O)_mR_1$)- group (R_1 and m are as defined above), provided that when B_4 is a thio group, then A_3 is not a hydrogen atom];

2) a R_1-B_4-CO-R_4-B_4'-group (R_1, B_4 and R_4 are as defined above, B_4' is the same as or different from B_4, and has the same meaning as that of B_4, provided that when B_4 is a thio group, then R_2 is not a hydrogen atom) or a D_2-R_4-B_4-group (D_2, R_4 and B_4 are as defined above);

3) a R_2-SO_2-NR_1-group (R_2 is as defined above, provided that a hydrogen atom is excluded, and R_1 is as defined above);

4) a (b)-group ((b) is as defined above);

5) a (c)-group ((c) is as defined above) or

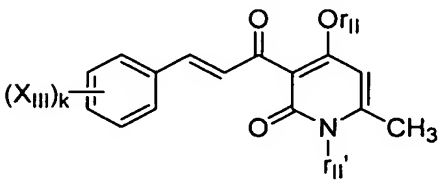
6) a R_1A_1N-NR_1'-group (R_1, A_1 and R_1' are as defined above);

V. T_A represents a hydrogen atom, an A_9'-group (A_9' is as defined above), a D_5-R_4-group (D_5 and R_4 are as defined above) or a M_c-group (m_c is as defined above);

VI. K_a represents a hydrogen atom, a halogen atom or a C1-C10 alkyl group, L_a represents a hydrogen atom, a C1-C10 alkyl group or a M_b-group (M_b is as defined above), or K_a and L_a may form a C1-C10 alkylene group, provided that when an A ring is a benzene ring, then q is not 0; and

the "as defined above" in he same symbol between a plurality of substituents indicates that the plurality of substituents independently represent the same meaning as that described above and, between the plurality of substituents, a selection range of selected substituents is the same, while the selected substituents may be the same or different as far as they are selected in the range];

17. A I type collagen gene transcription suppressing composition, which comprises a 2 (1H)-pyridinone compound represented by the formula (XVII):



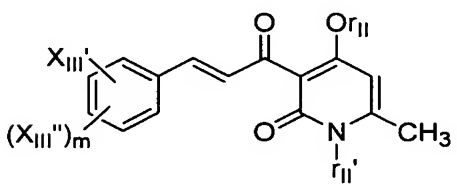
(XVII)

[wherein XIII represents a hydrogen atom, or a hydroxy

group, or a halogen atom, or a C1-C4 alkyl group optionally substituted with a halogen atom or a C1-C4 alkoxy group, or a C2-C4 alkenyl group, or a C2-C4 alkynyl group, or a C1-C4 alkoxy group, or a R_1-$S(O)_l$-group (R_1 represents a C1-C4 alkyl group, and l represents an integer of 0 to 2), or a nitro group, or a cyano group, or a carboxy group, or a C1-C4 alkoxycarbonyl group, or a $(R_I)_2N$-group (R_I is as defined above), or a R_I-CO-NH-group (R_I is as defined above), or a R_IO-CO-NH-group (R_I is as defined above), or a R_INH-CO-NH-group (R_I is as defined above), or a $(R_I')_2N$-CO-group (R_I' represents a hydrogen atom or a C1-C4 alkyl group) or a RB-group (B represents an oxygen atom or a sulfur atom, and R represents a C1-C4 alkyl group substituted with a halogen atom), K represents an integer of 1 to 4, when k is an integer of 2 to 4, X_{III}'s may be different, r_{II} and $r_{II'}$ are the same or different, and represent a hydrogen atom or a C1-C4 alkyl group];

and an inert carrier;

18. A 2(1H)-pyridinone compound represented by the formula (XVIII):

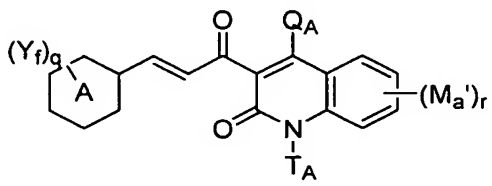


(XVIII)

[wherein $X_{III'}$ represents a C2-C4 alkyl group, or a C1-C4

alkyl group substituted with a halogen atom or a C1-C4 alkoxy group, or a C2-C4 alkenyl group, or a C2-C4 alkynyl group, or a C2-C4 alkoxy group, or a R_I-S(O)$_l$-group (R_I represents a C1-C4 alkyl group, and l represents an integer of 0 to 2), or a cyano group, or a carboxy group, or a C1-C4 alkoxycarbonyl group, a $(R_{II})_2N$-group (R_{II} represents a C2-C4 alkyl group), or a R_I-CO-NH-group (R_I is as defined above), or a R_IO-CO-NH-group (R_I is as defined above), or a R_INH-CO-NH-group (R_I is as defined above), or a $(R_I')_2N$-CO- group (R_I' represents a hydrogen atom or a C1-C4 alkyl group), or a RB-group (B represents an oxygen atom or a sulfur atom, and R represents a C1-C4 alkyl group substituted with a halogen atom), X_{III}" represents a hydrogen atom, a halogen atom, a C1-C4 alkyl group, or a C1-C4 alkoxy group, m represents 1 or 2, when m is 2, X_{III}"'s may be different, and r_{II} and $r_{II'}$ are the same or different, and represent a hydrogen atom or a C1-C4alkyl group];

19. A I type collagen gene transcription suppressing composition, which comprises a 2(1H)-quinolinone compound represented by the formula (XIX):



(XIX)

[wherein

I. A represents a benzene ring or a pyridine ring;

II. In $(Y_f)_q$, Y_f is a substituent on a carbon atom, and represents a group of the following X group or Y group, q represents 0, 1, 2, 3, 4 or 5, when q is 2 or more, Y_f's are the same or different and, when q is 2 or more, the adjacent two same or different Y_f's constitute a group of a Z group, and may be fused with an A ring;

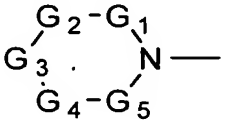
(1) a X group:

a M_a-group [M_a represents a R_b-group (R_b represents a C1-C10 alkyl group optionally substituted with a halogen atom), a halogen atom, a nitro group, a cyano group, a hydroxyl group, a R_c-B_a-R_d-group (R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-C10 alkylene group), a HOR_d-group (R_d is as defined above), a R_e-CO-R_d-group (R_e represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, and R_d is as defined above), a R_e-CO-O-R_d-group (R_e and R_d are as defined above), a R_eO-CO-R_d-group (R_e and R_d are as defined above), a HO-CO-CH=CH-group, a $R_eR_e'N$-R_d-group (R_e and R_e' are the same or different, R_e is as defined above, R_e' has the same meaning as that of R_e, and R_d is as defined above), a R_e-CO-NR_e'-R_d-group (R_e, R_e' and R_d are as defined above),

a R_bO-CO-N(R_e)-R_d-group (R_b, R_e and R_d are as defined above), a R_eR_e'N-CO-R_d-group (R_e, R_e' and R_d are as defined above), a R_eR_e'N-CO-NR_e''-R_d-group (R_e, R_e' and R_e'' are the same or different, R_e and R_e' are as defined above, R_e'' has the same meaning as that of R_e, and R_d is as defined above), a R_eR_e'N-C(=NR_e'')-NR_e'''-R_d-group (R_e, R_e', R_e'' and R_e'' are the same or different, R_e, R_e' and R_e'' are as defined above, R_e''' has the same meaning as that of R_e, and R_d is as defined above), a R_b-SO_2-NR_e-R_d-group (R_b, R_e and R_d are as defined above), a R_eR_e'N-SO_2-R_d-group (R_e, R_e' and R_d are as defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl group];

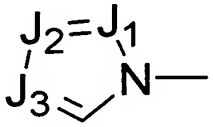
(2) a Y group:

a M_b-R_d-group [M_b represents a M_c-group {M_c represents a M_d-R_d'-group {M_d represents a phenyl group optionally substituted with a M_a-group (M_a is as defined above), or a pyridyl group optionally substituted with a M_a-group (M_a is as defined above), or a naphthyl group optionally substituted with a M_a-group (M_a is as defined above), or

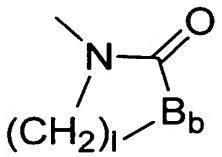
(b) 

a (b)-group {in (b), G_1, G_2, G_4 and G_5 represent a methylene group which is connected to an adjacent atom with a single bond, and may be substituted with a methyl group,

or a methine group which is connected to an adjacent atom with a double bond, and may be substituted with a methyl group, and G_3 represents a single bond, or a double bond, or a C1-C10 alkylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1-$group {R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with a halogen atom or a R_2-B_1-group (R_2 represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkynyl group, and B_1 represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group}, or a C2-C10 alkenylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1-$group (R_1 is as defined above)},

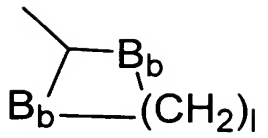
(c) 

a (c)-group (in (c), J_1, J_2 and J_3 are the same or different, and represent a methine group optionally substituted with a methyl group, or a nitrogen atom),

(d) 

a (d)-group (l is 2, 3 or 4, and B_b represents an oxy group or a thio group)

or

(e) 

an (e)-group (l and B_b are as defined above), R_d' is the same as or different from R_d, and has the same meaning as that of R_d}}, a M_c-B_a-group (M_c and B_a are as defined above), a M_c-CO-group (M_c is as defined above), a M_c-CO-O-group (M_c is as defined above), a M_cO-CO-group (M_c is as defined above), a M_cR_eN-group (M_c and R_e are as defined above), a M_c-CO-NR_e-group (M_c and R_e are as defined above), a M_cO-CO-NR_e-group (M_c and R_e are as defined above), a M_cR_eN-CO-group (M_c and R_e are as defined above), a M_cR_eN-CO-NR_e'-group (M_c, R_e and R_e' are as defined above), a M_cR_eN-C(=NR_e')-NR_e''-group (M_c, R_e, R_e' and R_e'' are as defined above), a M_c-SO_2-NR_e-group (M_c and R_e are as defined above) or a M_cR_eN-SO_2-group (M_c and R_e are as defined above), and R_d is as defined above];

(3) a Z group:

a -N=C(Y_a)-Y_a'-group (Y_a represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, or a C1-C10 alkoxy group, and Y_a' represents an oxy group, or a thio group, or an imino group optionally substituted with a C1-C10 alkyl group), a -Y_b-Y_b'-Y_b''-group (Y_b and Y_b' are the same or different, and represent a methylene group, or an oxy group, or a thio group, or a

sulfinyl group, or an imino group optionally substituted with a C1-C10 alkyl group, and Y_b' represents a C1-C4 alkylene group optionally substituted with a halogen atom, or a C1-C4 alkylene group optionally having an oxo group) or a $-Y_c-O-Y_c'-O-$group (Y_c and Y_c' are the same or different, and represent a C1-C10 alkylene group);

III. Q_A represents a hydroxy group, a (b)-group ((b) is as defined above), an $A_9-B_6-B_c$-group [A_9 represents a substituent of the following A_7 group or A_8 group, B_6 represents a carbonyl group or a thiocarbonyl group, and B_c represents an oxy group or a $-N((O)_mR_1)-$group (m represents 0 or 1, and R_1 is as defined above), provided that when A_9 is a hydrogen atom, then B_c is not a sulfonyl group], an $A_7''-SO_2-B_c$-group (A_7'' represents a substituent of the following A_7'' group, and B_c is as defined above), an $A_8-SO_2-B_c$-group (A_8 represents a substituent of the following A_8 group, and B_c is as defined above, provided that A_8 is not a hydrogen atom), a $R_1R_1'N-SO_2-B_c$-group (R_1 is as defined above, R_1' is the same as or different from R_1, and has the same meaning as that of R_1, and B_c is as defined above), a (b)$-SO_2-B_c$-group ((b) and B_c are as defined above), an $A_9'-B_c$-group (A_9' represents a substituent of the following A_7' group or A_8' group, and B_c is as defined above), a $D_5-R_4-B_c$-group (D_5 represents a substituent of the following D_5 group, R_4 represents a C1-C10 alkylene group, and B_c is as

defined above), a M_c-B_3-B_c-group (B_3 represents a carbonyl group, a thiocarbonyl group or a sulfonyl group, and M_c and B_c are as defined above) or a M_c-B_c-group (M_c and B_c are as defined above);

(1) an A_7 group:

a C2-C10 alkenyl group optionally substituted with a halogen atom, a C2-C10 alkynyl group, a C3-C10 haloalkynyl group, a R_2-B_1-R_4-group (R_2 and B_1 are as defined above, and R_4 is as defined above), a D_4-R_4-group (D_4 represents a substituent of the following D_4 group, and R_4 is as defined above), a D_5-R_4-group (D_5 represents a substituent of the following D_5 group, and R_4 is as defined above), a D_1-R_4-group {D_1 represents a substituent of the following D_1 group, and R_4 is as defined above}, a (b)-R_4-group ((b) is as defined above, and R_4 is as defined above), a (c)-R_4-group ((c) is as defined above, and R_4 is as defined above), a D_2-R_4-group {D_2 represents a substituent of the following D_2 group, and R_4 is as defined above}, a D_3-R_4-group {D_3 represents a substituent of the following D_3 group, and R_4 is as defined above}, an A_4-SO_2-R_4-group {A_4 represents a (b)-group ((b) is as defined above), a (c)-group ((c) is as defined above) or a $R_1R_1'N$-group (R_1 and R_1' are as defined above), and R_4 is as defined above} or an A_2-CO-R_4-group (A_2 represents a substituent of the following A_2 group, and R_4 is as defined above);

(2) an A_8 group: a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom;

(3) an A_7' group: a C3-C10 alkenyl group optionally substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R_2-B_1-R_4'-group (R_2 and B_1 are as defined above, and R_4' represents a C2-C10 alkylene group), a D_4-R_4'-group (D_4 and R_4' are as defined above), a D_1-R_4'-group (D_1 and R_4' are as defined above), a (b)-R_4'-group ((b) and R_4' are as defined above), a (c)-R_4'-group ((c) and R_4' are as defined above), a D_2-R_4-group (D_2 and R_4 are as defined above), a D_3-R_4'-group (D_3 and R_4' are as defined above) or an A_2-CO-R_4-group (A_2 and R_4 are as defined above);

(4) an A_8' group: a C1-C10 alkyl group or a C2-C10 haloalkyl group;

(5) an A_7'' group: a C2-C10 alkenyl group, a C3-C10 alkenyl group substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R_2-B_1-R_4'-group (R_2, B_1 and R_4' are as defined above), a D_4-R_4'-group (D_4 and R_4' are as defined above), a D_5-R_4-group (D_5 and R_4 are as defined above), a D_1- R_4'-group (D_1 and R_4' are as defined above), a (b)-R_4'-group ((b) and R_4' are as defined above), a (c)-R_4'-group ((c) and R_4' are as defined above), a D_2-R_4-group (D_2 and R_4 are as defined above), a NO_2-R_4-group (R_4 is as defined above) or an A_2-CO-R_4-group

(A_2 and R_4 are as defined above);

(i) a D_4 group: a hydroxy group or an A_1-O-group [A_1 represents a R_3-$(CHR_0)_m$-$(B_2$-$B_3)_m$'-group {R_3 represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom or a R_2-B_1-group (R_2 and B_1 are as defined above), or a C2-C10 alkenyl group, or a C2-C10 alkynyl group, R_0 represents a hydrogen atom, a C1-C10 alkyl group or a C2-C10 haloalkyl group, m is as defined above, B_2 represents a single bond, an oxy group, a thio group or a $-N((O)_nR_1')$-group (R_1' is as defined above, and n represents 0 or 1), B_3 is as defined above, m' represents 0 or 1 and, when B_3 is a sulfonyl group, then m is 0, and R_3 is not a hydrogen atom}];

(ii) a D_5 group: an $O=C(R_3)$-group (R_3 is as defined above), an A_1-$(O)_n$-$N=C(R_3)$-group (A_1, n and R_3 are as defined above), a R_1-B_0-CO-R_4-$(O)_n$-$N=C(R_3)$-group [R_1, R_4, n and R_3 are as defined above, and B_0 represents an oxy group, a thio group or a $-N((O)_mR_1')$-group (R_1' and m are as defined above)], a D_2-R_4-$(O)_n$-$N=C(R_3)$-group (D_2, R_4, n and R_3 are as defined above) or a R_1A_1N-$N=C(R_3)$-group (R_1, A_1 and R_3 are as defined above);

(iii) a D_1 group: a $(R_1$-$(O)_k$-$)A_1N$-$(O)_k'$-group (R_1 and A_1 are as defined above, and k and k' are the same or different, and represent 0 or 1);

(iv) a D_2 group: a cyano group, a $R_1R_1'NC(=N$-$(O)_n$-$A_1)$-group

(R_1, R_1', n and A_1 are as defined above), an $A_1N=C(-OR_2)$-group (A_1 and R_2 are as defined above) or a NH_2-CS-group;

(v) a D_3 group: a nitro group or a R_1OSO_2-group (R_1 is as defined above);

(vi) an A_2 group:

1) an A_3-B_4-group

[A_3 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 haloalkyl group, or a C2-C10 alkenyl group optionally substituted with a halogen atom, or a C3-C10 alkynyl group optionally substituted with a halogen atom, or a R_a-$(R_4)_m$-group (R_a represents a phenyl group, a pyridyl group, a furyl group or a thienyl group, optionally substituted with a halogen atom, a C1-C10 alkyl group, a C1-C10 alkoxy group or a nitro group, and R_4 and m are as defined above), or a C1-C10 alkyl group substituted with a (b)-R_4-group ((b) and R_4 are as defined above), a (c)-R_4-group ((c) and R_4 are as defined above), a R_2-B_1-R_4-group (R_2, B_1 and R_4 are as defined above), a D_4-R_4-group (D_4 and R_4 are as defined above), a D_5-group (D_5 is as defined above), a D_1-R_4-group (D_1 and R_4 are as defined above), a D_2-group (D_2 is as defined above), a D_3-R_4-group (D_3 and R_4 are as defined above) or an A_4-SO_2-R_4-group {A_4 is as defined above, and R_4 is as defined above},

B_4 represents an oxy group, a thio group or a -$N((O)_mR_1)$-group (R_1 and m are as defined above), provided

that when B_4 is a thio group, then A_3 is not a hydrogen atom];

2) a R_1-B_4-CO-R_4-B_4'-group (R_1, B_4 and R_4 are as defined above, B_4' is the same as or different from B_4, and has the same meaning as that of B_4, provided that when B_4 is a thio group, then R_2 is not a hydrogen atom) or a D_2-R_4-B_4-group (D_2, R_4 and B_4 are as defined above);

3) a R_2-SO_2-NR_1-group (R_2 is as defined above, provided that a hydrogen atom is excluded, and R_1 is as defined above);

4) a (b)-group ((b) is as defined above);

5) a (c)-group ((c) is as defined above) or

6) a R_1A_1N-NR_1'-group (R_1, A_1 and R_1' are as defined above);

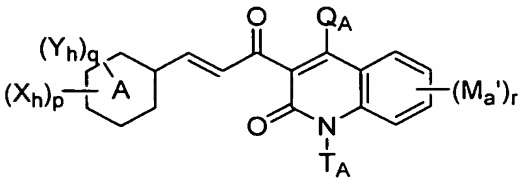
IV. T_A represents a hydrogen atom, an A_9'-group (A_9' is as defined above), a D_5-R_4-group (D_5 and R_4 are as defined above) or a M_c-group (M_c is as defined above);

V. M_a' is the same as or different from M_a, and has the same meaning as that of M_a, and r represents 0, 1, 2, 3 or 4; and

the "as defined above" in the same symbol between a plurality of substituents indicates that the plurality of substituents independently represent the same meaning as that described above and, between the plurality of substituents, a selection range of selected substituents is the same, while the selected substituents may be the same or different as far as they are selected in the range];

and an inert carrier;

20. A 2(1H)-pyridinone compound represented by the formula (XX):



(XX)

[wherein

I. A represents a benzene ring or a pyridine ring;

II. In $(X_h)_p$, X_h represents a hydroxy group, a halogen atom, a C1-C10 alkyl group, a C1-C10 alkoxycarbonyl group, a $(R')_2N$-group (R' represents a C1-C10 alkyl group), a nitro group or a C1-C10 alkoxy group, p represents 0, 1, 2, 3 or 4 and, when p is 2 or more, X_h's are the same or different, provided that when p is 2 or more, and in case that X_h is selected from a hydroxy group, a halogen atom, a C1-C10 alkyl group and a C1-C10 alkoxy group, then X_h's do not represent the same group or atom at the same time;

III. In $(Y_h)_q$, Y_h is a substituent on a carbon atom, and represents a substituent of the following X_7 group or Y_7 group, q represents 0, 1, 2, 3, 4 or 5, when q is 2 or more, Y_h's are the same or different and, when q is 2 or more, the adjacent two same or different Y_h's constitute a group of a Z_7 group, and may be fused with an A ring;

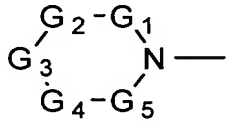
(1) a X_7 group:

a M_a-group [M_a represents a R_b-group (R_b represents a C1-C10 alkyl group optionally substituted with a halogen atom), a halogen atom, a nitro group, a cyano group, a hydroxy group, a R_c-B_a-R_d-group (R_c represents a C1-C10 alkyl group optionally substituted with a halogen atom, B_a represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group, and R_d represents a single bond or a C1-C10 alkylene group), a HOR_d-group (R_d is as defined above), a R_e-CO-R_d-group (R_e represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, and R_d is as defined above), a R_e-CO-O-R_d-group (R_e and R_d are as defined above), a R_eO-CO-R_d-group (R_e and R_d are as defined above), a HO-CO-CH=CH-group, a $R_eR_e'N$-R_d-group (R_e and R_e' are the same or different, R_e is as defined above, R_e' has the same meaning as that of R_e, and R_d is as defined above), a R_e-CO-NR_e'-R_d-group (R_e, R_e' and R_d are as defined above), a R_bO-CO-N(R_e)-R_d-group (R_b, R_e and R_d are as defined above), a $R_eR_e'N$-CO-R_d-group (R_e, R_e' and R_d are as defined above), a $R_eR_e'N$-CO-NR_e''-R_d-group (R_e, R_e' and R_e'' are the same or different, R_e and R_e' are as defined above, R_e'' has the same meaning as that of R_e, and R_d is as defined above), a $R_eR_e''N$-C(=NR_e'')-NR_e'''-R_d-group (R_e, R_e', R_e'' and R_e''' are the same or different, R_e, R_e' and R_e'' are as defined above, R_e''' has the same meaning as that of R_e, and R_d is as defined above), a R_b-SO_2-NR_e-R_d-group (R_b, R_e and R_d are as

defined above), a $R_eR_e'N-SO_2-R_d$-group (R_e, R_e' and R_d are as defined above), a C2-C10 alkenyl group or a C2-C10 alkynyl group], provided that when A represents a benzene ring, then a X_h-group (X_h is as defined above) is excluded;

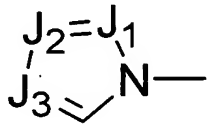
(2) a Y_7 group:

a M_b-R_d-group [M_b represents a M_c-group {M_c represents a M_d-R_d'-group {M_d represents a phenyl group optionally substituted with a M_a-group (M_a is as defined above), or a pyridyl group optionally substituted with a M_a-group (M_a is as defined above), or a naphthyl group optionally substituted with a M_a-group (M_a is as defined above), or

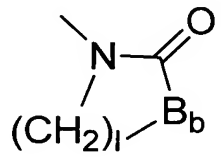
(b) 

a (b)-group {in (b), G_1, G_2, G_4 and G_5 represent a methylene group which is connected to an adjacent atom with a single bond, and may be substituted with a methyl group, or a methine group which is connected to an adjacent atom with a double bond, and may be substituted with a methyl group, and G_3 represents a single bond, or a double bond, or a C1-C10 alkylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1-$group {R_1 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 alkyl group substituted with a halogen atom or a R_2-B_1-group (R_2

represents a C1-C10 alkyl group, a C3-C10 alkenyl group or a C3-C10 alkynyl group, and B_1 represents an oxy group, a thio group, a sulfinyl group or a sulfonyl group), or a C3-C10 alkenyl group, or a C3-C10 alkynyl group}, or a C2-C10 alkenylene group optionally substituted with a methyl group, an oxy group, a thio group, a sulfinyl group, a sulfonyl group or a $-NR_1-$group (R_1 is as defined above)},

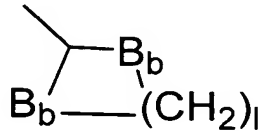
(c) 

a (c)-group (in (c), J_1, J_2 and J_3 are the same or different, and represent a methine group optionally substituted with a methyl group, or a nitrogen atom),

(d) 

a (d)-group (l is 2, 3 or 4, and B_b represents an oxy group or a thio group)

or

(e) 

an (e)-group (l and B_b are as defined above), R_d' is the same as or different from R_d, and has the same meaning as that of R_d}}, a M_c-B_a-group (M_c and B_a are as defined above), a M_c-CO-group (M_c is as defined above), a M_c-CO-O-group (M_c is as defined above), a M_cO-CO-group (M_c is as defined

above), a M_cR_eN-group (M_c and R_e are as defined above), a M_c-CO-NR_e-group (M_c and R_e are as defined above), a M_cO-CO-NR_e-group (M_c and R_e are as defined above), a M_cR_eN-CO-group (M_c and R_e are as defined above), a M_cR_eN-CO-NR_e'-group (M_c, R_e and R_e' are as defined above), a M_cR_eN-C(=NR_e')-NR_e''-group (M_c, R_e, R_e' and R_e'' are as defined above), a M_c-SO_2-NR_e-group (M_c and R_e are as defined above) or a M_cR_eN-SO_2-group (M_c and R_e are as defined above), and R_d is as defined above];

(3) a Z_7 group:

a -N=C(Y_a)-Y_a'-group (Y_a represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom, or a C1-C10 alkoxy group, and Y_a' represents an oxy group, or a thio group, or an imino group optionally substituted with a C1-C10 alkyl group), a -Y_b-Y_b'-Y_b''-group (Y_b and Y_b'' are the same or different, and represent a methylene group, or an oxy group, or a thio group, or a sulfinyl group, or an imino group optionally substituted with a C1-C10 alkyl group, and Y_b' represents a C1-C4 alkylene group optionally substituted with a halogen atom or a C1-C4 alkylene group optionally having an oxo group) or a -Y_c-O-Y_c'-O-group (Y_c and Y_c' are the same or different, or a C1-C10 alkylene group), provided that when p is 0, then Y_h does not fused with an A ring to form a benzo[1,3]dioxol ring;

IV. Q_A represents a hydroxy group, a (b)-group ((b) is as defined above), an A_9-B_6-B_c-group [A_9 represents a substituent of the following A_7 group or A_8 group, B_6 represents a carbonyl group or a thiocarbonyl group, and B_c represents an oxy group or a $-N((O)_mR_1$-group (m represents 0 or 1, and R_1 is as defined above), provided that when A_9 is a hydrogen atom, then B_c is not a sulfonyl group], an A_7"-SO_2-B_c-group (A_7" represents a substituent of the following A_7" group, and B_c is as defined above), an A_8-SO_2-B_c-group (A_8 represents a substituent of the following A_8 group, and B_c is as defined above, provided that A_8 is not a hydrogen atom), a $R_1R_1'N$-SO_2-Bc-group (R_1 is as defined above, R_1' is the same as or different from R_1, and has the same meaning as that of R_1, and B_c is as defined above), a (b)-SO_2-B_c-group ((b) and B_c are as defined above), an A_9'-B_c-group (A_9' represents a substituent of the following A_7' group or A_8' group, and B_c is as defined above), a D_5-R_4-B_c-group (D_5 represents a substituent of the following D_5 group, R_4 represents a C1-C10 alkylene group, and B_c is as defined above), a M_c-B_3-B_c-group (B_3 represents a carbonyl group, a thiocarbonyl group or a sulfonyl group, and M_c and B_c are as defined above) or a M_c-B_c-group (M_c and B_c are as defined above);

(1) an A_7 group:

a C2-C10 alkenyl group optionally substituted with a

halogen atom, a C2-C10 alkynyl group, a C3-C10 haloalkynyl group, a R_2-B_1-R_4-group (R_2 and B_1 are as defined above, and R_4 is as defined above), a D_4-R_4-group (D_4 represents a substituent of the following D_4 group, and R_4 is as defined above), a D_5-R_4-group (D_5 represents a substituent of the following D_5 group, and R_4 is as defined above), a D_1-R_4-group {D_1 represents a substituent of the following D_1 group, and R_4 is as defined above}, a (b)-R_4-group ((b) is as defined above, and R_4 is as defined above), a (c)-R_4-group ((c) is as defined above, and R_4 is as defined above), a D_2-R_4-group {D_2 represents a substituent of the following D_2 group, and R_4 is as defined above}, a D_3-R_4-group {D_3 represents a substituent of the following D_3 group, and R_4 is as defined above}, an A_4-SO_2-R_4-group {A_4 represents a (b)-group ((b) is as defined above), a (c)-group ((c) is as defined above) or a R_1R_1'-N-group (R_1 and R_1' are as defined above), and R_4 is as defined above} or an A_2-CO_2-R_4-group (A_2 represents a substituent of the following A_2 group, and R_4 is as defined above);

(2) an A_8 group: a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom;

(3) an A_7' group: a C3-C10 alkenyl group optionally substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R_2-B_1-R_4'-group (R_2 and B_1 are as defined above, and R_4' represents a

C2-C10 alkylene group), a D_4-R_4'-group (D_4 and R_4' are as defined above), a D_1-R_4'-group (D_1 and R_4' are as defined above), a (b)-R_4'-group ((b) and R_4' are as defined above), a (c)-R_4'-group ((c) and R_4' are as defined above), a D_2-R_4-group (D_2 and R_4 are as defined above), a D_3-R_4'-group (D_3 and R_4' are as defined above) or an A_2-CO-R_4-group (A_2 and R_4 are as defined above);

(4) an A_8' group: a C1-C10 alkyl group or a C2-C10 haloalkyl group;

(5) an A_7'' group: a C2-C10 alkenyl group, a C3-C10 alkenyl group substituted with a halogen atom, a C3-C10 alkynyl group optionally substituted with a halogen atom, a R_2-B_1-R_4'-group (R_2, B_1 and R_4' are as defined above), a D_4-R_4'-group (D_4 and R_4' are as defined above), a D_5-R_4-group (D_5 and R_4 are as defined above), a D_1-R_4'-group (D_1 and R_4' are as defined above), a (b)-R_4'-group ((b) and R_4' are as defined above), a (c)-R_4'-group ((c) and R_4' are as defined above), a D_2-R_4-group (D_2 and R_4 are as defined above), a NO_2-R_4-group (R_4 is as defined above) or an A_2-CO-R_4-group (A_2 and R_4 are as defined above);

(i) a D_4 group: a hydroxy group or an A_1-O-group [A_1 represents a R_3-$(CHR_0)_m$-$(B_2$-$B_3)_m'$-group {R_3 represents a hydrogen atom, or a C1-C10 alkyl group optionally substituted with a halogen atom or a R_2-B_1-group (R_2 and B_1 are as defined above), or a C2-C10 alkenyl group, or a C2-

C10 alkynyl group, R_0 represents a hydrogen atom, a C1-C10 alkyl group or a C2-C10 haloalkyl group, m is as defined above, B_2 represents a single bond, an oxy group, a thio group or a $-N((O)_nR_1')-$group (R_1' is as defined above, and n represents 0 or 1), B_3 is as defined above, m' represents 0 or 1 and, when B_3 is a sulfonyl group, then m is 0, and R_3 is not a hydrogen atom}];

(ii) a D_5 group: an $O=C(R_3)-$group (R_3 is as defined above), an $A_1-(O)_n-N=C(R_3)-$group (A_1, N and R_3 are as defined above), a $R_1-B_0-CO-R_4-(O)_n-N=C(R_3)-$group [$R_1$, R_4, n and R_3 are as defined above, and B_0 represents an oxy group, a thio group or a $-N((O)_mR_1')-$group (R_1' and m are as defined above)], a $D_2-R_4-(O)_n-N=C(R_3)-$group (D_2, R_4, n and R_3 are as defined above) or a $R_1A_1N-N=C(R_3)-$group (R_1, A_1 and R_3 are as defined above);

(iii) a D_1 group: a $(R_1-O)_k-)A_1N-(O)_k'-$group (R_1 and A_1 are as defined above, and k and k' are the same or different, and represent 0 or 1);

(iv) a D_2 group: a cyano group, a $R_1R_1'NC(=N-(O)_n-A_1-$group (R_1, R_1', N and A_1 are as defined above), an $A_1N=C(-OR_2)-$group (A_1 and R_2 are as defined above) or a NH_2-CS-group;

(v) a D_3 group: a nitro group or a R_1OSO_2-group (R_1 is as defined above);

(vi) an A_2 group:

1) an A_3-B_4-group

[A_3 represents a hydrogen atom, or a C1-C10 alkyl group, or a C2-C10 haloalkyl group, or a C2-C10 alkynyl group optionally substituted with a halogen atom, or a C3-C10 alkynyl group optionally substituted with a halogen atom, or a R_a-$(R_4)_m$-group (R_a represents a phenyl group, a pyridyl group, a furyl group or a thienyl group, optionally substituted with a halogen atom, a C1-C10 alkyl group, a C1-C10 alkoxy group or a nitro group, and R_4 and m are as defined above), or a C1-C10 alkyl group substituted with a (b)-R_4-group ((b) and R_4 are as defined above), a (c)-R_4-group ((c) and R_4 are as defined above), a R_2-B_1-R_4-group (R_2, B_1 and R_4 are as defined above), a D_4-R_4-group (D_4 and R_4 are as defined above), a D_5-group (D_5 is as defined above), a D_1-R_4-group (D_1 and R_4 are as defined above), a D_2-group (D_2 is as defined above), a D_3-R_4-group (D_3 and R_4 are as defined above) or an A_4-SO_2-R_4-group {A_4 is as defined above, and R_4 is as defined above},

B_4 represents an oxy group, a thio group or a -$N((O)_mR_1)$-group (R_1 and m are as defined above), provide that when A_4 is a thio group, then A_3 is not a hydrogen atom];

2) a R_1-B_4-CO-R_4-B_4'-group (R_1, B_4 and R_4 are as defined above, B_4' is the same as or different from B_4, and has the same meaning as B_4, provided that when B_4 is a thio group, then R_2 is not a hydrogen atom) or a D_2-R_4-B_4-group (D_2, R_4

and B_4 are as defined above);

3) a R_2-SO_2-NR_1-group (R_2 is as defined above, provided that a hydrogen atom is excluded, and R_1 is as defined above);

4) a (b)-group ((b) is as defined above);

5) a (c)-group ((c) is as defined above) or

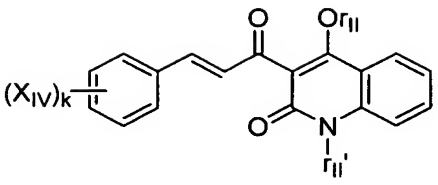
6) a R_1A_1N-NR_1'-group (R_1, A_1 and R_1' are as defined above);

V. T_A represents a hydrogen atom, an A_9'-group (A_9' is as defined above), a D_5-R_4-group (D_5 and R_4 are as defined above) or a M_c-group (M_c is as defined above);

VI. M_a' is the same as or different from M_a, and has the same meaning as that of M_a, and r represents 0, 1, 2, 3 or 4, provided that when an A ring is a benzene ring, then q is not 0 and, when an A ring is a benzene ring or a pyridine ring, then p and q are not 0 at the same time, in either case; and

the "as defined above" in the same symbol between a plurality of substituents indicates that the plurality of substituents independently represent the same meaning as that described above and, between the plurality of substituents, a selection range of selected substituents is the same, while the selected substituents may be the same or different as far as they are selected in the range];

21. A I type collagen gene transcription suppressing composition, which comprises a 2(1H)-quinolinone compound represented by the formula (XXI):



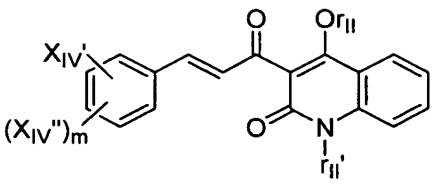
(XXI)

[wherein X_{IV} represents a hydrogen atom, or a hydroxy group, or a halogen atom, or a C1-C4 alkyl group optionally substituted with a halogen atom or a C1-C4 alkoxy group, or a C2-C4 alkenyl group, or a C2-C4 alkynyl group, or a C1-C4 alkoxy group, or a R_I-$S(O)_l$-group (R_I represents a C1-C4 alkyl group, and l represents an integer of 0 to 2), or a nitro group, or a cyano group, or a carboxy group, or a C1-C4 alkoxycarbonyl group, or a $(R_I)_2N$-group (R_I is as defined above), or a R_I-CO-NH-group (R_I is as defined above), or a R_I-O-CO-NH-group (R_I is as defined above), or a R_INH-CO-NH-group (R_I is as defined above), or a $(R_I')_2N$-CO-group (R_I' represents a hydrogen atom or a C1-C4 alkyl group), or a RB-group (B represents an oxygen atom or a sulfur atom, and R represents a C1-C4 alkyl group substituted with a halogen atom), k represents an integer of 1 to 4 and, when k is an integer of 2 to 4, X_{IV}'s may be different, and r_{II} and r_{II}' are the same or different, and represent a hydrogen atom or a C1-C4 alkyl group];

and an inert carrier;

22. A 2(1H)-quinolinone compound represented by the

formula (XXII):



(XXII)

[wherein X_{IV}' represents a C2-C4 alkyl group, or a C1-C4 alkyl group substituted with a halogen atom or a C1-C4 alkoxy group, or a C2-C4 alkenyl group, or a C2-C4 alkynyl group, or a C2-C4 alkoxy group, or a R_I-$S(O)_l$-group (R_I represents a C1-C4 alkyl group, and l represents an integer of 0 to 2), or a cyano group, or a carboxy group, or a C2-C4 alkoxycarbonyl group, or a $(R_{II})_2N$-group (R_{II} represents a C2-C4 alkyl group), or a R_I-CO-NH-group (R_I is as defined above), or a R_IO-CO-NH-group (R_I is as defined above), or a R_INH-CO-NH-group (R_I is as defined above), or a $(R_I')_2N$-CO-group (R_I' represents a hydrogen atom or a C1-C4 alkyl group), or a RB-group (B represents an oxygen atom or a sulfur atom, and R represents a C1-C4 alkyl group substituted with a halogen atom), X_{IV}" represents a hydrogen atom, a halogen atom, a C1-C4 alkyl group or a C1-C4 alkoxy group, m represents 1 or 2 and, when m is 2, X_{IV}"'s may be different, and r_{II} and r_{II}' are the same or different, and represent a hydrogen atom or a C1-C4alkyl group] ;

23. Use of a compound according to claims 5, 6, 8, 9,

11, 12, 13, 14, 16, 18, 20 or 22, as an active ingredient for suppressing transcription of a Type I collagen gene;

24. Use of a compound according to claims 5, 6, 8, 9, 11, 12, 13, 14, 16, 18, 20 or 22, as an active ingredient for decreasing expression of a Type I collagen gene to induce a reduction in accumulation of collagen and thereby improving tissue fibrosis;

25. A composition for improving tissue fibrosis, which comprises a compound according to claims 5, 6, 8, 9, 11, 12, 13, 14, 16, 18, 20 or 22, and an inert carrier;

26. A method for improving tissue fibrosis, which comprises administering an effective amount of a compound according to claims 5, 6, 8, 9, 11, 12, 13, 14, 16, 18, 20 or 22 to a mammal in need thereof;

27. Use of a compound according to claims 5, 6, 8, 9, 11, 12, 13, 14, 16, 18, 20 or 22, as an active ingredient for suppressing the activity of TGF-β;

28. A composition for suppressing the activity of TGF-β, which comprises a compound according to claims 5, 6, 8, 9, 11, 12, 13, 14, 16, 18, 20 or 22, and an inert carrier;

29. Use of a compound according to claims 5, 6, 8, 9, 11, 12, 13, 14, 16, 18, 20 or 22, as an active ingredient for inhibiting a promoting effect of TGF-β on transition to a hair regression phase to induce extension of a hair growth phase and thereby providing hair-growing effect;

30. A composition for hair growth which comprises a compound according to claims 5, 6, 8, 9, 11, 12, 13, 14, 16, 18, 20 or 22, and an inert carrier;

31. A method for growing hair, which comprises administering an effective amount of a compound according to claims 5, 6, 8, 9, 11, 12, 13, 14, 16, 18, 20 or 22 to a mammal in need thereof;

32. Use of a compound according to claims 1, 2, 3, 4, 7, 10, 15, 17, 19 or 21, as an active ingredient for suppressing transcription of a Type I collagen gene;

33. Use of a compound according to claims 1, 2, 3, 4, 7, 10, 15, 17, 19 or 21, as an active ingredient for decreasing expression of a Type I collagen gene to induce a reduction in accumulation of collagen and thereby improving tissue fibrosis;

34. A composition for improving tissue fibrosis, which comprises a compound according to claims 1, 2, 3, 4, 7, 10, 15, 17, 19 or 21, and an inert carrier;

35. A method for improving tissue fibrosis, which comprises administering an effective amount of a compound according to claims 1, 2, 3, 4, 7, 10, 15, 17, 19 or 21 to a mammal in need thereof;

36. Use of a compound according to claims 1, 2, 3, 4, 7, 10, 15, 17, 19 or 21, as an active ingredient for suppressing the activity of TGF-β;

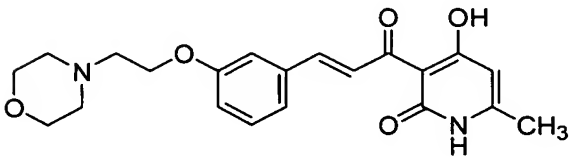
37. A composition for suppressing the activity of TGF-β, which comprises a compound according to claims 1, 2, 3, 4, 7, 10, 15, 17, 19 or 21, and an inert carrier;

38. Use of a compound according to claims 1, 2, 3, 4, 7, 10, 15, 17, 19 or 21, as an active ingredient for inhibiting a promoting effect of TGF-β on transition to a hair regression phase to induce extension of a hair growth phase and thereby providing hair-growing effect;

39. A composition for hair growth which comprises a compound according to claims 1, 2, 3, 4, 7, 10, 15, 17, 19 or 21, and an inert carrier;

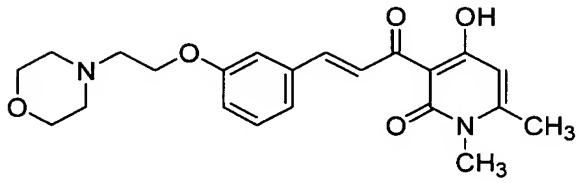
40. A method for growing hair, which comprises administering an effective amount of a compound according to claims 1, 2, 3, 4, 7, 10, 15, 17, 19 or 21 to a mammal in need thereof;

41. A 2(1H)-pyridinone compound represented by the formula (XXIII):



(XIII)

42. A 2(1H)-pyridinone compound represented by the formula (XXIV):



(XIV)